TENNESSEE COLLEGE OF APPLIED TECHNOLOGY, PARIS

2019 Governor's Investment in Technical Education (GIVE)

Advanced Agriculture Technologies

Lead Entity: Tennessee College of Applied Technology, Paris

Fiscal Agent: Tennessee College of Applied Technology, Paris

IN PARTNERSHIP WITH:

1. Paris-Henry County Chamber of Commerce
2. University of Tennessee at Martin
3. Henry County Schools
4. Tosh Farms, Middleton Lumber, Norwood Construction

Dr. Brad White, President, TCAT Paris

312 South Wilson Street
Paris, TN 38242
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Funding requested:

$500,000

Bradley W. White

President of Higher Education Institution
(Fiscal Agent)

Project Director (Lead Entity)

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PROJECT SUMMARY—Advanced Agriculture Technology

The overarching goal of this project is to poise today's agriculture students on the leading edge of innovative solutions, using technologies to improve agricultural operations. Recent advancements in technologies—audiovisual communications, digital sensors, data analysis program applications, and unmanned aerial vehicles—are fundamentally changing the landscape of modern agriculture. The result of these developing technologies is an explosion of job opportunities for tech-minded agriculture students. Educators are often told theirs is the business of preparing the workforce of the future for jobs and careers that have yet to be developed. The field of advanced agriculture technologies is an example of that theory. In a 2015 joint study from the USDA and Purdue University titled *Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources and the Environment*, findings estimated that over 15,000 new agriculture-based STEM job fields will be introduced by 2020.

The rise in global population coupled with scarcity of resources such as land and water mean a greater emphasis must be placed on training the agricultural workforce of tomorrow. The implementation of precision agriculture applications will produce farming operations that manage resources more responsibly while also maximizing output. The intent of this program is to provide students the opportunity to diversify their learning and working experiences across multiple modern agricultural disciplines. The program is designed to teach students cutting-edge precision agriculture principles, agribusiness and entrepreneurial foundations, as well as resource and data analysis required for success in today's high-tech agricultural landscape.

PROGRAM PROPOSAL

PART 1: DEMONSTRATION OF NEED

Education is critical for success of the 21st century farmer. The current agricultural landscape requires those in the ag industry to not only be experts on plants and animals, but to also be computer literate, mechanically inclined, business savvy, and knowledgeable about legal and political world events. Postsecondary education attainment is vital to preparing the workforce of a community and region for the employment demands of the future. Agricultural-related job opportunities are available in a plethora of specialty areas that support traditional farming operations. Opportunities exist in a variety of agricultural career clusters including science and technology, sales and marketing, purchasing, public relations, tourism, and education.

The Labor and Educational Alignment Program Report (LEAP) 2018 Occupational Analysis indicates that a strong STEM workforce is critical to Tennessee's continued educational and economic growth. The report projects 7.5% of new jobs in Tennessee from 2017 to 2022 will be in STEM-related fields, with a projected growth of 18% by the year 2027. Today's farming and food production industries are a mecca of opportunity for advanced STEM technology, with a variety of career opportunities available. This Advanced Agriculture Technologies program will prepare students for employment in skilled agriSTEM and agribusiness careers, not only in Henry County but throughout the Northwest, Southwest, and North Central regional of Tennessee.

The Tennessee Department of Economic and Community Development (TDEC) reports that the state of Tennessee saw $1.23 billion in revenues from food and agricultural industries

in 2017. According to the TDEC's County Profile Tool, Henry County currently employs over 600 individuals as Farmers, Ranchers and Other Agricultural Managers. Henry County has twelve large establishments in the Crop and Animal Production sector, employing over 340 employees, earning an average annual wage of $46,852. This average annual wage is well above the overall average annual wage of $36,007 for Henry County.

Additional agricultural employment opportunities are available within a 75-mile radius of Henry County, increasing opportunities for students throughout the Northwest region as well as expanding into both the Southwest and Northcentral regions. Gibson, Obion and Dyer counties in the Northwest region present an additional 250 employment opportunities in the Crop and Animal Production sector, with an annual average wage of $44,538. From 2012 to 2017, the Northwest region saw a 20.7% growth of employment opportunities in the category of First-Line Supervisors of Farming, Fishing, and Forestry Workers with an average wage of $21.36 per hour. The Northwest region boasts an additional 300 agriculture related opportunities noted as "Unique Occupations" on the TDEC's County Profile Tool, including Farming Equipment Mechanics and Service Technicians, Food and Meat Processing Workers, Agriculture Product Graders, and Veterinarians. Madison and Fayette counties in the Southwest region present an additional 250 jobs in the Crop and Animal Production sector, with an annual average wage of $44,955. The Southwest region's fastest-growing, in-demand job category is Farmers, Ranchers, and Other Agricultural Managers. This category saw a growth rate of 95.5% with 43 new jobs in 2017. In the Northcentral region, Dickson County employs 265 in the Crop and Animal Production sector with an average wage of $49,378.

LEAP 2018 highlights jobs with high employer demands, several correlating to agriculture. Farm Workers specializing in Animal Care experienced an increase of 33.3% in 2017 resulting in an additional 112 jobs. The demand for Farm Equipment Mechanics increased 28.6% with 45 new jobs in 2017. Agriculture Equipment Operators saw 73 new jobs in 2017, representing a growth of 25.9%. Supervisors of Farmworkers saw a 20.7% increase with 35 new positions, and 56 new Agricultural Product Grader positions were available in 2017 for a growth of 19.1%.

It is important to note the Tennessee Department of Economic Development's project development work in West Tennessee in the area of Food and Agriculture. These projects, bringing new industry to West Tennessee, represent a commitment to continued agricultural growth in the region. TNECD work landed Tyson in Obion County in August 2017, with plans to bring over 330 new jobs and an economic investment of over $80,000,000. In November 2017, that work expanded to Gibson County, including a $320,000,000 economic investment which will lead to 1,600 new jobs. While these projects continue to be in the development stages, their impact is being felt throughout the region. The need for a qualified, skilled workforce to fill these positions is expanding throughout the 75-mile driving radius of the establishments.

Advanced agriculture-related employment opportunities and growth projections are also highlighted on the State of Tennessee's Jobs4TN.gov website. According to the site, more than 700 agriculture-related jobs were advertised online in Tennessee during the month of July 2019. The areas with the highest advertised openings were Crop Production and Agriculture Management, with 410 and 163 openings, respectively. The average annual wages advertised for Crop Production was $39,260 and $57,408 for Agriculture Management. Additional areas

advertised included Natural Resources Management with 83 openings and an average wage of $48,932; Ag Support (17 openings) and Animal Production (18 openings), with average annual wages of $43,836 and $38,948 respectively. The long-term employment projections found on the site for these industry sectors is important to note. While the Agriculture Management and Ag Support sectors are projected to experience moderate growth, 8.6% and 8.04% respectively, the other ag-related sectors are projected to see exponential growth in Tennessee. 2016 to 2020 employment opportunities in the Natural Resources Management sector are projected to grow from 28,540 to 67,730, a 137.27% increase. In the area of Animal Production, a growth rate of 186.62% is expected, growing from 4,840 positions to 13,860. Finally, the Crop Production sector is projected to expand from 15,880 jobs in 2016 to 45,810 jobs in 2026, representing a 188.48% growth rate.

Annual average wage data indicates that all presented agriculture-related occupations offer livable wages for a single adult household, using the MIT Living Wage Calculator. The 2018 Living Wage for the State of Tennessee was $10.75 per hour, or an annual wage of $22,360. The Living Wage for Henry County in 2018 was $9.88 per hour, or an annual wage of $20,550. TNECD reports the annual average wages of current agriculture-related employees in the region are $44,538 to $49,378. The Jobs4TN.gov site's agriculture-related openings advertised average annual wages ranging from $39,260 to $57,408.

The employment opportunities presented, both current and projected, demonstrate an area of need for a skilled, educated agricultural workforce not only in our county, but throughout the region. As modern agriculture becomes more technical, it is essential that the future workforce is prepared with a strong educational training background in appropriate

technologies and practices. Farmers, community workforce leaders, and employers of local and regional agriculture industries recognize the need for educated, highly-trained individuals in the field of advanced agriculture technology.[1] The implementation of the Advanced Agriculture Technologies (AAT) program at TCAT Paris, in partnership with Henry County Schools, will lead to the development of a workforce pool skilled in entry-level agriculture safety, agriculture machinery management and maintenance, crop and livestock management and marketing, and advanced precision agriculture technology applications. The AAT program will include earning a variety of industry-recognized certifications and will lay the groundwork for future educational coursework and potential enrollment in the Bachelor of Science in Agriculture program at the University of Tennessee at Martin.[2]

[1] Appendix A: Chamber of Commerce and Employer Letters of Support
[2] Appendix B: University of Tennessee Martin Letter of Support

Part 2: PROGRAM PLAN

Henry County Schools offers 25 Career and Technical Education (CTE) programs of study directly aligned to the Tennessee Department of Education's 16 Career Clusters.[3] Students are typically recruited into these career cluster programs prior to entry of high school as 9th graders, and complete at least one course within their chosen program of study each year through the 12th grade. To be identified as a program concentrator, a student must complete a minimum of three courses in a specific program of study. As students progress from Level 1 to Level 4 courses, the academic and technical skill framework of these pathways develops from an introductory level to mastery of industry-specific skills. Throughout the program of study course progression, students are exposed to an increasingly complex set of technical and workforce readiness skills, designed to prepare them for entry into both the world of work and postsecondary enrollment. Three-year enrollment data of Henry County Schools indicates that CTE course enrollments have seen an incremental increase at all course levels. Additionally, increases have been made in the attainment of industry certifications and work-based learning placements.[4] The implementation of this program will enhance and expand current EPSO opportunities for students in agriculture programs of study by creating new dual enrollment course offerings, providing opportunities to earn aligned industry certifications, and expanding partnerships with local employers through additional work-based learning placements.

[3] Appendix C: Henry County Schools Course Catalog and Programs of Study Guide
[4] Appendix D: Henry County Schools CTE Course Enrollment Data Table

Three of the programs of study offered in Henry County Schools are from the Agriculture, Food, and Natural Resources career cluster: Agribusiness, Veterinary and Animal Science, and Agricultural Engineering and Applied Technologies. As noted in the most recent Drive to 55 Pathways to Postsecondary report, all of these agriculture programs of study are aligned to labor codes identified by TNECD and the Tennessee Department of Labor and Workforce Development as a high need in our region.

The Agribusiness program of study progression includes Agriscience, Principles of Agribusiness, Ag Leadership, and Greenhouse Management.[5] This course progression introduces students to skills and knowledge required to develop successful agricultural business management practices. The students in this program of study manage the school greenhouse, a school-based enterprise supporting class and FFA activities. Management of the greenhouse requires students to plan what plants will be planted each semester, then to tend to the plants on a daily basis. Students are involved in the management of the greenhouse outside of school hours, including summer and winter breaks. Students are responsible for developing the promotional materials, planning sales events, and management of all materials and inventory.

The Veterinary and Animal Science program of study progression includes Agriscience, Small Animal Science, Large Animal Science, and Veterinary Science.[6] This program of study is designed for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of agriculture professions. In this program of study, course content covers such topics and skills as principles of health and disease, basic animal care,

[5] Appendix E: Agribusiness Program of Study Course Progression Document
[6] Appendix F: Veterinary and Animal Science Program of Study Course Progression Document

proper laboratory procedures, and the anatomical systems of a range of small and large animals. Extensive hands-on lab activities are incorporated into all levels of the program.

The course progression for the Agricultural Engineering and Applied Technologies program of study includes Agricscience, Principles of Ag Mechanics, and DE Machine Tool.[7] This program of study places emphasis on laboratory activities involving small engines, tractors, and agricultural equipment. It is currently the only Ag pathway that offers students EPSO (Early Postsecondary Opportunity) credit, through DE Machine Tool through TCAT Paris.

The goal of this grant program is to provide students with industry-leading skills and knowledge required for success in modern agricultural careers. Students will complete coursework that offers exposure to the principles of agriculture, animal science, horticulture, technology integration and advanced precision agriculture applications. The program will include courses already being offered, and the creation of new dual enrollment course offerings at TCAT Paris. The new course offerings will be a component of a new program to be offered at TCAT Paris—Advanced Agriculture Technologies.[8]

Upon completion of the Advanced Agriculture Technologies diploma, graduates will be skilled in entry-level agriculture safety, agriculture machinery management and maintenance, crop and livestock management and marketing, and advanced precision agriculture technology applications. Aligned industry-recognized certifications that will be earned through the program will include OSHA 10, CPR and First Aid, Commercial Applicators Certification (03), and the FAA Remote Pilot Certificate. For those wishing to continue their studies, earning a Diploma in

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[7] Appendix G: Agricultural Engineering and Applied Technologies Program of Study Course Progression
[8] Appendix H: Advanced Agriculture Technologies Diploma, Proposed Course Progression

Advanced Agriculture Technologies from TCAT Paris may be recognized as transfer hours in the Bachelor of Science in Agriculture—Precision Agriculture Technology Option at the University of Tennessee Martin.

The goal of this project is to develop and implement the Advanced Agriculture Technologies (AAT) diploma program at TCAT Paris, creating multiple new opportunities for dual enrollment and work-based learning placements for students in the Agriculture, Food, and Natural Resources Career Cluster. The AAT program will also include earning a variety of industry-recognized certifications and will lay the groundwork for future educational coursework and enrollment in the Bachelor of Science in Agriculture program at the University of Tennessee at Martin.

The plan for implementation includes a detailed scope of work, requiring a commitment of time and resources, from a plethora of sources. At all levels, the work will be lead by the implementation leads: Dr. Brad White, President of TCAT Paris and Betsy Allison, Director of 9-12 and CTE for Henry County Schools. Several additional persons will form a variety of committees charged with the work of the grant and will be focused on the creation and implementation of the Work Ethics Diploma in Henry County[9] and a formal plan for expansion of work-based learning opportunities[10] for students. Meetings will be held monthly through the implementation phases, and committee work will be reviewed and monitored. Committees developed thus far include: Implementation Design Committee: Dr. Brad White, Betsy Allison,

[9] Appendix I: Proposed Work Ethics Diploma Framework
[10] Appendix J: Proposed Work-based Learning Framework

Dr. Jan Latimer (TCAT Paris), Laura Moss (HCSS Ag Teacher), Ryan Inman (HCSS Ag Teacher), Travis McCleese (Paris-Henry County Chamber of Commerce).

Curriculum Development Committee: Dr. Brad White, Betsy Allison, Dr. Jan Latimer (TCAT Paris), Laura Moss (HCSS Ag Teacher), Ryan Inman (HCSS Ag Teacher), member TBD (UTM).

Promotional Materials Committee: Betsy Allison, Dr. Jan Latimer (TCAT Paris), Laura Moss (HCSS Ag Teacher), Ryan Inman (HCSS Ag Teacher), Becky Bullion (HCHS Counselor), Dr. Michele Webb (HCHS Principal), Kasey Muench (Graphic Designer).

Timeline	Task	Responsible
November 2019	• TBR Approval of AAT Program	Dr. Brad White, TCAT Paris Dr. Jan Latimer, TCAT Paris
December 2019 January 2020	• Development of AAT Course Offerings	• Implementation Design Committee
February 2020 March 2020	• Alignment of AAT Courses to high school courses • Development of AAT program promotional materials (website, print publications, high school enrollment materials) • Development of Work Ethics Diploma	• Curriculum Development Committee • Promotional Materials Committee
April 2020	• Informational meetings with prospective students and parents • Advertisement and recruitment of AAT program instructor • Advertisement and recruitment of WBL Coordinator	• Promotional Materials Committee • Implementation Design Committee
May 2020	• Hiring of AAT program instructor • Hiring of WBL Coordinator • Student enrollment applications submitted	• Implementation Design Committee • Implementation Design Committee • Becky Bullion, HCHS Counselor
June 2020	• Teacher externship program (non-ag teachers to do externships in ag-based industries to gain exposure to skills and knowledge required in current workforce) • Development of course curriculum • Procurement of AAT program equipment, materials, and supplies • Development of WBL partnerships and Work Ethics Diploma partners	• Betsy Allison, HC Schools • AAT instructor, Curriculum Committee • WBL Coordinator, Chamber Partners

July 2020	• Teacher externship program (non-ag teachers to do externships in ag-based industries to gain exposure to skills and knowledge required in current workforce) • Development of course curriculum • Procurement of AAT program equipment, materials, and supplies • Development of WBL partnerships and Work Ethics Diploma partners	• Betsy Allison, HC Schools • AAT instructor, Curriculum Committee • WBL Coordinator, Chamber Partners
August 2020	• AAT Program Kick-off and First cohort of AAT students begin courses • Continued development of course curriculum, procurement of materials and supplies	• AAT Instructor, Implementation Committee • AAT instructor, Curriculum Committee
September 2020	• WBL placements begin	• WBL Coordinator, Chamber Partners
October 2020 to May 2021	• Continued development of course curriculum, procurement of materials and supplies • Continued review and development of WBL program placements and Work Ethics Diploma partners	• AAT Instructor, Implementation Committee, Curriculum Committee • WBL Coordinator, Chamber Partners
June 2021	• Teacher externship program (non-ag teachers to do externships in ag-based industries to gain exposure to skills and knowledge required in current workforce)	• Betsy Allison, HC Schools
July 2021	• Teacher externship program (non-ag teachers to do externships in ag-based industries to gain exposure to skills and knowledge required in current workforce)	• Betsy Allison, HC Schools
August 2021	• 2nd cohort of AAT students begins	• AAT Instructor, Implementation Committee, Curriculum Committee
September 2021 to March 2022	• Continued development of course curriculum, procurement of materials and supplies • Continued review and development of WBL program placements and Work Ethics Diploma partners	• AAT Instructor, Implementation Committee, Curriculum Committee • WBL Coordinator, Chamber Partners
April 2022	• Expected graduation date for first cohort of AAT students	• AAT Instructor, Implementation Committee, Curriculum Committee

The most vital committee to the development and implementation of new program opportunities for students is the Student Support Services Committee. This group will work throughout the entire grant period to ensure that learning and working environments best meet the needs of all students involved. Support from this committee will include college and career readiness interest and aptitude inventory assessments, assistance with FAFSA, TN Promise and other applications necessary for dual enrollment and postsecondary admittance. An additional component of this committee will be to secure funding sources outside of the GIVE grant that will provide support for students classified as at-risk or in need of financial support to purchase the required course materials and supplies. The Student Support Services Committee will include: Becky Bullion (HCHS School Counselor), Casey Matterson (GearUp Counselor), TCAT Student Services representatives, Sherri Middleton (FFA Alumni Committee), Traci Middleton (Agriculture Education Advisory Board).

The members of all GIVE Grant committees are dedicated to the development and implementation of the Advanced Agriculture Technologies Diploma. As our world ecosystem encounters challenges like a changing climate and a growing population, agriculture is responding by innovating. New digital tools and techniques are helping farmers provide the crops we need while using less of our natural resources. The proposed AAT program will expand agriculture and advanced technologies education to the next generation of learners, ensuring that the future workforce of our community has academic knowledge and practical skills required for success.

GRANT BUDGET				
GIVE Program Competitive Grant				
The grant budget line-item amounts below shall be applicable only to expenses incurred during the following Applicable Period: BEGIN: October 24, 2019 END: April 25, 2022				
POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY [11]	GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1, 2	Salaries, Benefits & Taxes	$292,000	0.00	$292,000
4, 15	Professional Fee, Grant & Award [12]	0.00	0.00	0.00
5, 6, 7, 8, 9, 10	Supplies, Telephone, Postage & Shipping, Occupancy, Equipment Rental & Maintenance, Printing & Publications	$29,000	0.00	$29,000
11, 12	Travel, Conferences & Meetings	$35,000	0.00	$35,000
13	Interest [2]	0.00	0.00	0.00
14	Insurance	0.00	0.00	0.00
16	Specific Assistance To Individuals	0.00	0.00	0.00
17	Depreciation [2]	0.00	0.00	0.00
18	Other Non-Personnel [2]	$24,000	0.00	$24,000
20	Capital Purchase [2]	$120,000	0.00	$120,000
22	Indirect Cost	0.00	0.00	0.00
24	In-Kind Expense	0.00	0.00	0.00
25	GRAND TOTAL	$500,000	0.00	$500,000

[11] Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, Uniform Reporting Requirements and Cost Allocation Plans for Sub recipients of Federal and State Grant Monies, Appendix A. (posted on the Internet at: www.state.tn.us/finance/act/documents/policy3.pdf).

[12] Applicable detail follows this page if line-item is funded.

Summary of Budget Expenses:

Line 1 Salaries and Wages

- This line item includes salary costs for two positions to be implemented through this grant funding: 1) Advanced Agriculture Technology Instructor, and 2) Work-based Learning Coordinator.
- These positions will be paid through grant funds for the 2020-2021 and 2021-2022 school years, with a commitment from TCAT Paris and the Henry County School System to seek alternative sources to fund these positions moving forward at the end of the grant period.

Line 2 Employee Benefits & Payroll Taxes

- Estimated benefits and taxes of the two grant funded positions

Line 5 Supplies

- This line item represents the budgeted amount for materials and supplies necessary for monthly committee meetings, advisory panel meetings, as well as light food and beverage offerings at program recruitment and kick-off events

Line 7 Postage and Shipping

- List line item represents the budgeted amount to cover all postage and delivery fees of advisory committee materials, and promotional program materials to prospective students and employer partners

Line 10 Printing and Publications

- Line item 10 represents costs of printed course materials, purchase of texts and resource materials, as well as subscription services for AAT course instructional purposes (ESRI ArcGIS, Mapthematics, AgDNA, etc..)

Line 11 Travel

- This line item represents expenses for travel of AAT instructor, WBL Coordinator and grant committee leads to attend the Association of Career and Technical Education (ACTE) national conference and the ACTE best practices convention each year of the grant cycle. This expense represents all associated travel costs, including transportation, meals, lodging, and per diem payments.

Line 12 Conferences and Meetings

- This line item represents expenses for registration of AAT instructor, WBL Coordinator and grant committee leads to attend the Association of Career and Technical Education (ACTE) national conference and the ACTE best practices convention each year of the grant cycle. Additional expenses in this line item will include any registration and meeting fees associated with attending other meetings relevant to the work of the grant.

Line 18 Other Non-personnel Expenses

- Expenses in this line item include:
  - Advertising and program promotional costs
  - Testing fees for both students and instructor, associated with the industry certifications aligned with the coursework of the program (OSHA, Commercial Applicators Certification, FAA Drone Pilot License)

Line 19 Capital Purchases

- This is not an exhaustive list, as our intent is to allow the AAT instructor to finalize the requests for equipment required for successful implementation of the program. The equipment will be housed on the appropriate campus (TCAT Paris or HCHS) depending on the course level the associated with the equipment purchase. Equipment needs expected include:

Air compressor	Air pollution model	Drill Press	Moisture Meters, Wood & Specialty
Altimeters	Barometers	Autoclave	Global Positioning Systems (GPS)
Anemomenters	Mechanics tool sets	pH meters	Dust collection system
Aeration pump	Benches & stands	Electric Drill	Electrical demonstrator kits
Arc Welder	Band Saw	Engine Repair Stand	Classroom set of laptops or chromebooks and printer
Belt Sander	Aquaculture system	Calculators	Unmaned Areal Vehicles (Drones)
Binoculars	Bolt cutters	Projection screen	Animal and Plant life cycle and systems models
Microscopes	Caliper Sets	Projector	Soil Erosion Simulator Kit
Micrometers	Compasses	Handheld GPS	Lockers/Personal Storage
Cable ripper	Circuit breaker demo	Hydraulic press	Dissolved Oxygen & Water Meters
Data Loggers	Audio-visual equipment	CNC Plasma Machine	Soil Test Instruments, Thermometers & Sieves

Line 25 Total Expenses

- Total Expenses for this grant application total $500,000

Paris-Henry County
CHAMBER OF COMMERCE

September 4, 2019

Dear GIVE Grant Review Committee:

The economic growth of Henry County and the entire Northwest Tennessee region is contingent on a strong and well-trained workforce that understands both industry demands and workplace skills. The Paris-Henry County Chamber of Commerce is deeply engaged in these efforts, partnering with local industry leaders, the Henry County School System, and TCAT Paris on a number of projects that are making a real difference for the future of our community.

The Paris-Henry County Chamber of Commerce supports the work of this grant application to implement a new diploma program at TCAT Paris, Advanced Agriculture Technologies. This program will strengthen CTE coursework provided to Henry County High School students and will lead to the expansion of Work Based Learning Partnerships with local ag industries. Chamber members consistently cite the lack of a skilled workforce and ongoing staffing challenges as a top concern for their businesses. The evolving demands of a modern, globally-competitive labor market necessitate a continued emphasis on rigorous academics, career preparation, and skill development. The implementation of the AAT program is an example of both our K-12 education and higher education systems proactively working together to equip students with the educational tools they need that align with the high-skill demands of the jobs of the future.

Specifically, the Paris-Henry County Chamber of Commerce will support this work in the following ways:

- The Chamber will work across the county and region to boost knowledge and utilization of dual enrollment and Tennessee Reconnect funds that provide tuition for high school and adult learners to attain a certification or degree. Tennessee Reconnect presents a great opportunity for adult learners and will help Henry County achieve our Drive to 55 goals.
- The Chamber will advocate for the increased utilization by local industries of the Work Ethic Diploma that encourages the development of employability skills that help our youth to develop the necessary skills for employment and life success.
- The Chamber will advocate for new and continued industry partnerships in Henry County that facilitate workforce and industry skills through work-based learning placements.

Thank you for considering this application and investing in our rural workforce.

With respect,

Travis McCreese, Executive Director

2508 East Wood Street • Paris, TN 38242 • **ph** 731.642.3431 • **fax** 731.642.3454
email pariscoc@paristnchamber.com • www.**paristnchamber**.com

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HENRY, TENNESSEE 38231-0308

SCALE HOUSE (731) 243-4868
OFFICE (731) 243-4861
FAX (731) 243-4860
SHOP (731) 243-4864

September 4, 2019

GIVE Grant Review and Selection Committee:

The role of advanced technologies training is vital to the success of all operations at Tosh Farms. Our equipment mechanics work on a variety of agricultural machines, using a variety of tools and specialized technologies. The knowledge required of our employees needs to be comprehensive because they service a variety of mechanical systems and small engines, and most need to possess knowledge of small engines, traditional gasoline combustion engines and diesel vehicle engines. On any given day, the mechanics are charged with the on-site maintenance and repair of all the equipment.

Tosh Farms is proud to support the work of TCAT Paris and the Henry County School System in the development of the Advanced Agriculture Technologies Diploma program. We are honored to be a member of this partnership and will support the work by hosting work-based learning experiences for students.

These on-the-job experiences foster future employment success, and lead to positive educational outcomes. Exposure to internships (paid and unpaid), site visits, and job shadowing all contribute to the employability of youth in our community. Participating in this experience will help youth identify their career interests, build confidence, learn about workplace culture and make what they are learning in school more meaningful through real-world applications. At the same time, we hope that they will develop new skills that are vital for long-term success and employability.

By working together in a school-business-community partnership, we believe all partners of this program can make this happen. As a major employer in our community, we find that developing this kind of working relationship results in considerable benefits, including developing a future workforce in our specialized areas, and engaging in mentoring opportunities.

Tosh Farms being a partner in this high school to postsecondary to workforce program is win-win for all involved. We look forward to this opportunity to create a successful school-business-community partnership.

Thank you,

Jonathan Tosh
Tosh Farms

MIDDLETON
LUMBER COMPANY LLC
P.O. Box 87 ♦ 5755 Hwy 641 North
Puryear, TN 38251 ♦ (731) 642-7621

September 4, 2019

To the GIVE Grant Review Committee:

In agriculture and forestry, the need to increase production while at the same time minimize the environmental impact of agricultural production processes, continues to remain at the forefront. In modern forest management, a number of activities are oriented towards wood production or forest inventories with the aims of controlling trees, height, crown height, bark thickness, canopy, humidity, and other factors. A variety of advancements in agriculture technologies have occurred in recent years, creating the need for a highly-trained and skilled forestry workforce. Skill and knowledge is just as important in the post-production process, including transportation, storage, packing, selection, classification and distribution. A skilled workforce is of vital importance for minimizing costs and negative environmental impact.

Middleton Lumber is honored to be a part of the work to develop and implement the Advanced Agriculture Technologies Diploma program, a partnership with TCAT Paris and the Henry County School System. This program will strengthen CTE coursework provided to Henry County High School students and will lead to equipping students with the educational tools they need that align with the high-skill demands of the jobs of the future.

Middleton Lumber Company supports the work of this partnership in the following ways:

- Serving on the Agriculture Advisory Committee, meeting throughout the school year to review current course requirements and to assure alignment to development of appropriate workforce skills.
- Hosting both teacher and student work-based learning experiences, including job shadow opportunities, student internships (unpaid) and teacher externships, all in an effort to expose students and educators to the work that is done in our company and the academic and technical skills required to be successful in our industry.

Sincerely,

Traci Middleton

Middleton Lumber

September 5, 2019

To the GIVE Grant Review Committee:

In the construction industry, equipment is constantly evolving and incorporating advanced technologies. GPS guidance, satellite imagery, machine control, and precision lasers help provide more accurate operation data and schematics. Technology is always important to help small business owners solve problems and find more efficient and cost-effective ways of doing business.

Norwood Construction supports the work to develop and implement the Advanced Agriculture Technologies Diploma program, a partnership with TCAT Paris and the Henry County School System. This program will strengthen CTE coursework provided to Henry County High School students and will lead to equipping students with the educational tools they need that align with the high-skill demands of the jobs of the future.

Norwood Construction's role in this partnership is to serve on the Agriculture Advisory Committee, meeting throughout the school year to review current course requirements and to assure alignment to development of appropriate workforce skills. Norwood Construction is currently researching our role in student work-based learning experiences, including job shadow opportunities, student internships (unpaid) and teacher externships. We feel these activities will expose students and educators to the work that is done in our company and the academic and technical skills required to be successful in our industry.

Sincerely,

Norwood Construction

THE UNIVERSITY OF TENNESSEE
MARTIN

Division of Finance and Administration
224 Administration Building
Martin, Tennessee 38238
Office: 731.881.7800
Fax: 731.881.7967

September 5, 2019

Dr. Leah Watkins
Henry County Schools
217 Grove Blvd.
Paris, TN 38242

Dear Dr. Watkins:

Thank you for reaching out and sharing that Henry County Schools and TCAT Paris are working to develop an Advanced Agriculture Technologies Diploma program for a GIVE grant application. As I understand the implementation of the Advanced Agriculture Technologies (AAT) program at TCAT Paris, in partnership with Henry County Schools, will lead to the development of a workforce pool skilled in entry-level agriculture safety, agriculture machinery management and maintenance, crop and livestock management and marketing, and advanced precision agriculture technology applications. The AAT program will include earning a variety of industry-recognized certifications and will lay the groundwork for future educational coursework and potential enrollment in the Bachelor of Science in Agriculture program at The University of Tennessee at Martin (UTM).

The University of Tennessee at Martin (UTM) will provide support for your work on the GIVE grant. This will include, but not limited to, preliminary review to coursework and support of a crosswalk of coursework to develop an articulation agreement.

Sincerely,

Petra McPhearson

Petra McPhearson
Vice Chancellor for Finance and Administration
The University of Tennessee at Martin

E.W. Grove School
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Henry County High School
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2019-2020 Course Catalog

Graduation Requirements

English	4 credits
Math[1]	4 credits
Science[2]	3 credits
World History	1 credit
US History	1 credit
Economics	½ credit
US Government	½ credit
Lifetime Wellness	1 credit
Physical Education	1 credit
Computer Education[3]	1 credit
Personal Finance	1 credit
Program of Study/Pathway	3 credits
Foreign Language[4]	2 credits
Fine Art[4]	1 credit
Electives	3 credits

To earn a diploma from HCHS, students must earn the prescribed 27 credits and have a satisfactory record of discipline and attendance.

State Testing
(Required by ALL)

Algebra I, Geometry, Algebra II, Biology I, English I, English II, World History, US History

ACT: Taken in 11th grade

English: Students are required to earn four credits in English. Students must take an English class each year.

Mathematics: [1]Students graduating in 2013 and beyond are required to have a **minimum** of four credits in math. All students complete a mathematics course sequence including Algebra I, Geometry, Algebra II and one additional math course. All students **must take a math class each year of high school**. *High school math courses taken during middle school will serve to accelerate a student's level of math but will not be a substitute for the "math each year" requirement.*

Science[2]**:** Students are required to earn a minimum of three credits in science. Biology I and Chemistry I are required by all. The Henry County Board of Education requires all students to take a science during their senior year.

Social Studies: Students are required to earn three credits in Social Studies. World History, US History, Government and Economics are required. The Henry County Board of Education requires all students to take a Social Studies class during their senior year.

Lifetime Wellness, Physical Education and Personal Finance: One full credit in each is required.

Computer Education[3]**:** All students enrolled at EW Grove are required to take either Computer Applications or Computer Science Foundations to meet this requirement. Students that transfer to Henry County in the 10th-12th grades may be exempt from this requirement.

Program of Study/Pathway: Students will have a minimum of 3 Program of Study/Pathway credits which relate to career and academic areas of interest.

Foreign Language/Fine Art[4]**:** Foreign Language and Fine Art may be waived for students not planning to attend a four-year college or university and may be replaced with three courses designed to enhance and expand the Program of Study/Pathway focus. Parents must sign a waiver form.

Electives: An elective is any course that is not already a requirement for graduation.

Athletes and Athletic Eligibility: Students who wish to play sports in Division I or Division II colleges and universities must meet the NCAA requirements for high school credits. These requirements are above and beyond what is required by the State of Tennessee. Certain high school courses will not count for NCAA core course requirements. Student athletes are encouraged to work closely with their school counselor to ensure all NCAA requirements are met.

TN Ready Tests: The State of Tennessee requires all students take TN Ready exams in order to receive a regular high school diploma. The grade for each test will be counted as 25% of the student's second quarter grade in the course.

ACT: The State of Tennessee requires all students take a series of assessments to assist in academic and career advisement. The ACT is given free of charge to all students in the spring semester of the 11th grade, during a regular school day. The ACT assesses college and career readiness skills of all students. The scores earned on the ACT in this program are college reportable scores, accepted by all colleges and universities. Beginning with the Class of 2018, students are required to have taken the ACT in order to graduate. **Students who score at or above all of the subject area readiness benchmarks on the ACT with graduate with Honors.** The ACT benchmarks are: English: 18, Math: 22, Reading: 22, Science: 23.

GRADE POINT AVERAGE (GPA)

The CUMULATIVE grade point average includes grades earned in all courses and is determined on a numerical scale. For instance, a student may have a cumulative GPA of 101.56 or 87.9.

The HOPE SCHOLARSHIP grade point average is based on a fixed quality point system. Points are earned for the grade in a course. For instance, a student may have a GPA of 3.25 or 3.75. (A = 4.0; B = 3.0; C = 2.0; D = 1.0; F = 0.0)

Weighted courses include the addition of 3, 4 (beginning in 2017-18) or 5 points to the added to the passing grade of the course.

Honors Courses and Courses Earning National Industry Certification	Early Post-Secondary Opportunities/Dual Enrollment Courses	Advanced Placement Courses
Will include the addition of 3 points to the grades used to calculate the semester average.	Will include the addition of 4 points to the grades used to calculate the semester average.	Will include the addition of 5 points to the grades used to calculate the semester average.

GRADUATION WITH HONORS, GRADUATION WITH DISTINCTION

Graduation with Honors: Students who score at or above all of the subject area readiness benchmarks on the ACT will graduate with Honors. The ACT benchmarks are: English: 18, Math: 22, Reading: 22, Science: 23.

Graduation with Distinction: Students will be recognized as graduating with Distinction by attaining at least a 3.0 GPA and completing at least one of the following:

- Earn a nationally-recognized industry certification
- Participate in at least one Governor's School
- Participate in at least one of the state's All State musical organizations
- Be selected as a National Merit Finalist or Semi-Finalist
- Attain a score of 31 or higher composite score on ACT
- Attain a score of 3 or higher on at least two AP exams
- Earn 12 or more semester hours of transcripted postsecondary credit

Students must complete the necessary paperwork in the School Counseling Office to receive Distinction recognition. Students graduating with Honors and/or Distinction are recognized during the commencement ceremony.

READY GRADUATE INDICATOR

A newer requirement included in the Every Student Succeeds Act (ESSA) for school and district accountability is an "indicator of school quality and student success." Tennessee's goal in creating this indicator is to capture evidence of student performance beyond academic proficiency to represent a holistic, well-rounded education.

How does a student meet this Ready Graduate Indicator? A Ready Graduate meets one of the following criteria (students can only be "counted" once):

- score a 21 or higher on the ACT; OR
- complete four early postsecondary opportunities (EPSOs); OR
- complete two EPSOs + earn an industry certification (on a CTE pathway leading to a credential); OR
- complete 2 EPSOs + earn a score of 31 or higher on the ASVAB

EARLY POSTSECONDARY OPPORTUNITIES (EPSOs)

EPSOs are courses that allow students the chance to earn college credit while still in high school. The Henry County School System currently offers several avenues for students to earn EPSO credits: Advanced Placement, Dual Enrollment, CLEP and Student Industry Certification.

Advanced Placement (AP)

Advanced Placement courses are taught according to the College Board Advanced Placement guidelines and students will use college level materials and texts. AP exams must be taken on a specific date and hour during the second or third week of May. Students enrolled in an AP course at Grove or HCHS are required to take the correlating AP exam in order to receive high school credit for the course. Students are responsible for any fees related to the AP exam. It is important to note that the determination of college credit is done at the receiving institution of higher learning. This means that every college or university sets the level of performance expected on the AP exam in order to accept the exam for college credit. It is the responsibility of the student to research the score requirements at the college or university they wish to attend. Specific course descriptions for each AP course offered by Henry County Schools can be found in this catalog. Students may inquire about taking AP tests for courses not offered at HCHS. Advanced Placement Courses offered for the 2019-2020 school year will include:

AP Human Geography
AP Chemistry
AP US History
AP Psychology
AP Physics
AP Computer Science Principles
AP English III
AP Calculus
AP Computer Science A
AP Biology
AP English IV
AP Statistics
AP Environmental Science

Dual Enrollment (DE)
Students who meet specified admission requirements have the privilege of applying to earn credit through Jackson State Community College (JSCC) and/or Tennessee College of Applied Technology (TCAT). Students meeting set requirements will be eligible for the Dual Enrollment Grant during their junior and senior years of high school. The grant funding typically covers the cost of the Dual Enrollment class, but does not pay for any needed textbooks, supplies, and/or materials. Information and Orientation meeting will be required in Spring and Summer prior to enrollment.

Dual Enrollment courses are offered in a variety of formats. Some are held on the HCHS campus and are taught by HCHS faculty. Other DE courses are taken at the TCAT campus, just across the street from HCHS. Several DE course options will be available to students on the JSCC campus at Central School in Paris, and many dual enrollment courses will be offered online. When students enroll in college courses, they must follow the rules and schedules of both HCHS and the college they are taking the dual enrollment course from. For the 2019-2020 school year, the following Dual Enrollment courses will be offered to students:

Dual Enrollment: Jackson State Community College (JSCC)
11th and 12th grades only; application and admission to JSCC required

DE English IV(1010)
DE College Algebra
DE Speech
DE Sociology
DE Spanish 1010 and 1020
DE English IV(1020)
DE Biology I (1010)
DE Music Appreciation
DE Psychology
DE French 1010 and 1020
DE US History
DE Biology II (1020)
DE Statistics & Probability
DE Accounting

Dual Enrollment: Tennessee College of Applied Technology (TCAT)
11th and 12th grades only; application and admission to TCAT required; MINIMUM of 2 sections of same course per year; all DE TCAT courses align with a specific program of study/pathway. Supply fee required each semester (varies by course). Courses offered include:

DE Industrial Maintenance
DE Residential Maintenance
DE Cosmetology
DE Health Info Management
DE Welding
DE Machine Tool
DE Collision Repair
DE Computer Info Technology
DE Motorcycle/ATV Repair
DE Admin Office Technology

INDUSTRY CERTIFICATION (IC)
Industry certifications are earned through secondary and postsecondary career and technical education programs and courses. High school students are encouraged to focus their elective credits on robust, career-aligned learning programs of study (also known as pathways). All student industry certification options in Henry County Schools are aligned with local, state and national postsecondary and employment readiness opportunities. Industry certifications offered to qualified students at HCHS could include:

Certified Production Technician (CPT), OSHA 10, American Welding Society Certified Welder, Animal Science Certification, NCCER Construction Technology, Adobe Illustrator Specialist Certification, Child Development Associate (CDA), Certified Nursing Assistant (CNA), CompTIA IT Fundamentals, MicroSoft MOUS Specialist (Word, PowerPoint, Excel)

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)
Developed by the College Board, College Level Examination Program (CLEP) exams can be taken by students to assess mastery of postsecondary-level material acquired in a variety of ways, including through general academic instruction, significant independent study or extracurricular work. Students may earn credit for postsecondary coursework in a specific subject. Henry County High School does not set the scoring criteria or award credit for CLEP exams; that is done at the postsecondary institution. Students and parents are encouraged to contact the college or university they plan to attend to determine which CLEP assessments are accepted, and the minimum score requirements. CLEP opportunities are available in:

American Literature, Analyzing & Interpreting Literature, College Composition, English Literature, Humanities, French, Spanish, German, American Government, History of US, Human Growth & Development, Intro to Educational Psychology, Intro to Psychology, Intro to Sociology, Principles of Macroeconomics, Principles of Microeconomics, Biology, Chemistry, Calculus, Natural Sciences, Financial Accounting, Information Systems, Intro to Business Law, Principles of Management, Principles of Marketing

SCHEDULING PROCEDURES AND POLICIES

During each spring semester, registration information sessions are held. These informational sessions will include: 1) a presentation of information found throughout this course catalog; 2) the opportunity to meet with teachers and students currently enrolled in available programs; 3) the opportunity to work with a counselor or other trained faculty member to create/review/adjust the student's 4-year plan and to make course request selections.

The master schedule for the school is created ***based on the course requests of the students***.

All students receive their schedules on the first day of the new semester. Should schedules be available before the first day of school, communication from the school (typically via email, Facebook, and/or Twitter) will relay schedule availability and access.

Schedule Change Requests: Requests for schedule changes must be done during the designated drop/add period at the beginning of a semester or prior to a semester beginning (dates will be communicated). Only VALID schedule changes will be considered. Valid requests could include updating course selections based on summer school credits or correcting a scheduling error made by the school. INVALID changes include changing classes because of reconsiderations, for the sake of getting a different teacher, or to take classes with one's friends, and will not be considered. A student may request a change of teacher if the student is retaking a class that he/she failed with the same teacher during a previous semester. Again, the master schedule has been completed based on course requests and schedule changes will be very limited.

No Dropping in Level: Students who requested and who were recommended for Honors and Advanced Placement courses will be obligated to remain in them during the year. Students may not drop a level because they changed their minds over the summer or because they desire a different teacher. Simply finding the work of the course to be difficult is not a valid reason for a course change. Consideration, however, will be given to special hardships.

Courses Must Be Taken In Sequence: Students must pass one level of a course before they can take the next level of the same course. For example, students must pass Spanish I before they can take Spanish II. Students must pass English I before they can take English II, English II before they can take English III, and so on.

Class Structure: Grove and HCHS are on a 4x4 block system with 4 ½-week grading periods. Class periods are typically 90 minutes long with 4 periods per day in a normal day. Courses for one-half credit are nine-weeks in duration. Full credit courses are eighteen-weeks (or one semester) in duration. Students have the opportunity to earn eight credits per school year.

Standard level courses follow the content standards, learning expectations and performance indicators approved by the Tennessee State Board of Education and Henry County Schools. Standard level courses are open to all students.

Honors level courses substantially exceed the content standards, learning expectations and performance indicators of standard courses. Teachers of honors courses model instructional approaches that facilitate maximum interchange of ideas among students: independent study, self-directed research and learning and appropriate use of technology. All honors courses include multiple assessments exemplifying coursework such as: short answer, constructed-response, writing prompts, performance based tasked, portfolios and analytical writing.

Additionally, Henry County School Board Policy 4.6 requires that honors level courses include a minimum of five (5) of the following components:

1) extended reading assignments that connect with the specified curriculum;
2) research-based writing assignments that address and extend the course curriculum;
3) projects that apply course curriculum to relevant situations;
4) open ended investigations in which the student selects the questions and designs the research;
5) writing assignments that demonstrate a variety of modes, purposes and styles;
6) integration of appropriate technology;
7) deeper exploration of the culture, values, and history of the discipline;
8) extensive opportunities for problem solving experiences through imagination, critical analysis, and application;
9) job shadow experiences with presentations which connect class study to the world of work.

The following is a list of all courses ***TYPICALLY*** offered at E.W. Grove and Henry County High Schools. Keep in mind that all course offerings are dependent upon course requests, enrollment, and faculty teaching assignments. E.W. Grove and HCHS set their course sections and build their master schedules based entirely on student requests for courses. The spring registration determines the courses that the schools will offer the following fall. Once the master schedules are created, students are obligated to take the courses they requested. Students, therefore, should plan their schedule requests carefully, in a manner which matches their abilities and educational goals.

COURSE DESCRIPTIONS

ENGLISH

All students are required to earn four credits in English while in high school, and are required to take an English course each year. The English Department program in Henry County Schools uses an English language arts curriculum designed for whole-class instruction. Developed by professional educators, this curriculum guides teachers and students through the development of thematic units that ensure all students can read, understand, and express their understanding of complex, grade-level texts.

English IA/IB** is a course designed to give a brief review of basic grammatical skills before moving into more advanced reading, writing, speaking and listening skills. These skills are based upon the standards designated by the Tennessee Department of Education and are taught in an integrated progression that ensures all students meet post-secondary and workforce expectations.

Honors English I is a course designed to give a brief review of basic grammatical skills before moving into more advanced reading, writing, speaking and listening skills. These skills are based upon the standards designated by the Tennessee Department of Education and are taught in an integrated progression that ensures all students meet post-secondary and workforce expectations. Not only does this course move at a quicker pace than a standard English class, but it also requires additional expectations as set forth by the Tennessee Board of Education (Policy 3.301) and the Henry County Board of Education (Policy 4.60). This course focuses on challenging students with nonfiction passages, literature and enhanced writing expectations. Text analysis will center on examining the structure, purpose and central ideas of a passage, and writing assignments will emphasize constructing various types of strong sentences and improving organization, content, and style in written work.

English II: English II is a course designed to improve writing skills and to emphasize reading comprehension. Course work will include various types of composition, reading selections from the text and additional readings. (pre-requisite: English I)

Honors English II This course provides a challenging, enriched curriculum for the college-bound student. Emphasis will be placed on the development of essay writing and research techniques. The course will focus on developing strong analytical thinking and writing skills and will work to prepare students for ACT and AP English III (AP English Language). (pre-requisite: English I)

English III: This course English III is designed to refine writing skills and to increase the student's knowledge and appreciation of both classical and contemporary American literature. The course focuses on learning basic principles of grammar and usage, increasing vocabulary skills, constructing various types of strong sentences, and emphasizing organization, content and style in written work. (pre-requisite: English II)

Honors English III This course will feature American literature and focus on advanced principles of grammar and usage, increasing vocabulary skills, writing persuasive essays and literary analyses, recognizing the various elements of literature, developing advanced reading skills through the short story, drama and novel. Additional topics will include literary terminology and approaches to literary criticism. Major out of class reading and writing assignments will be required. (pre-requisite: English II)

AP English III *(course taught in tandem with AP US History, encompassing both semesters, students earn 1 credit in each)* The AP English III course challenges students who have established a record of achievement and self-discipline in the study of English. The assignments will focus on preparation for the AP English Language and Composition Exam, AP English IV and future college independence. Students will be expected to identify major American literary genres and historical periods, to reinforce vocabulary through personal reading and in-class assignments, to develop topics using rhetoric, synthesis, argumentation, and research, and to express ideas clearly in oral and reports and multiple written essays. Through close reading and discussion, students will develop a language of discourse for non-fiction writing. Numerous supplemental readings and documented papers will be required. (pre-requisite: English II)

English IV: English IV is designed to further refine writing skills and increase the student's knowledge and appreciation of both contemporary and classical British literature. Coursework will include advanced styles of composition, selected readings from outside sources, development of advanced research skills and the improvement of listening and speaking. (pre-requisite: English III)

DE English IV (English 1010): This course is the study and practice of expository and persuasive writing. Topics will include critical reading and writing essays, with emphasis on research, writing process and effective formatting. Dual Enrollment English IV is a college level course offered in conjunction with Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn a credit in both high school English and a freshman composition class. Note: DE English 1020 is the next course in progression and may be offered as well. (pre-requisite: English III)

AP English IV: This is a college level course for students who wish to pursue college credit while in high school. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. In May, students will take the national AP exam designed by the College Board to determine if they may receive 3-6 hours of freshman level college credit. This course pursues varied genres and writers from world literature. The student will be expected to identify major literary genres and literary periods, review modes of composition and how those best fit individual needs for communication, and express ideas clearly in both oral and written reports. (pre-requisite: English III)

Creative Writing: Creative writing is designed to aid students in their creative expression, as well as delivery of one's writing. Students will read and discuss articles on the craft of writing. Students will read and evaluate the effectiveness of fiction of varying styles, and will write and workshop short stories. Students will also analyze poetic vocabulary and read and interpret poems of varying styles. Students will be expected to deliver their writing to an audience. **This course is only offered at Grove.**

Math

All students are required to complete a math course sequence including at minimum Algebra I, Geometry, Algebra II and one additional mathematics course. All students must take a math class each year of high school. High school math courses taken during middle school will serve to accelerate a student's level of math but will not be a substitute for the "math each year" requirement. The mathematics program in Henry County Schools provides multiple opportunities for advanced study and significant support for the scheduling of those course options. Students are strongly advised to develop a plan for their mathematics courses in consultation with parents, school counselors, and especially with mathematics teachers. This plan should reflect a student's aptitude, interests and post-secondary aspirations and should be reviewed annually for continued applicability.

Algebra IA/Algebra IB:** Algebra I uses problem situations, physical models and appropriate technology to extend algebraic thinking and engage student reasoning. Problem solving situations will provide all students an environment that promotes communication and fosters connections within mathematics to other disciplines and to the real world.

Honors Algebra I uses problem situations, physical models and appropriate technology to extend algebraic thinking and engage student reasoning. Problem solving situations will provide all students an environment that promotes communication and fosters connections within mathematics to other disciplines and to the real world. In accordance with the Tennessee Department of Education Curriculum Standards, students in the course will understand computations results and operations involving real numbers in multiple systems, understand properties of and relationships between subsets and elements of the real number system; understand and apply algebraic properties in order to perform operations with polynomials; solve linear equations; use the Pythagorean Theorem, and understand basic counting procedures and concepts of probability. Extensive out of class and independent problem solving will be expected at the Honors Algebra I level.

Geometry: The heart of Geometry is the study of transformations and the role transformations play in defining congruence. The topic of transformations was introduced in a primarily experiential manner in Grade 8 and is formalized in the Geometry course with the use of precise language. The need for clear use of language is emphasized through vocabulary, the process of writing steps to perform constructions, and ultimately as part of the proof-writing process. Geometry is the study of two and three dimensional geometric figures introduced by points, lines, planes and writing proofs. (pre-requisite: Algebra I)

Honors Geometry emphasizes inductive and deductive reasoning to independently make and evaluate mathematical arguments and construct appropriate proofs of the fundamental theorems of geometry. Students will utilize multiple representations (verbal, iconic/pictorial, graphical, symbolic) to solve problems, model mathematical ideas, and to communicate solution strategies. In addition, appropriate technology will be incorporated to develop understanding of abstract mathematical ideas, to facilitate problem solving and to produce accurate and reliable models. (pre-requisite: Algebra I)

Algebra II: Algebra II extends and deepens the mathematical concepts and procedures development in Algebra I and introduces the mathematics student to higher order polynomial, rational and transcendental functions. Students will understand the hierarchy of the complex number system and relationships among the elements, properties and operations. Students will also understand the trigonometric functions and their relationships, understand statistical sampling and calculate measures of central tendency and spread. Emphasis is placed on relations and functions, systems of equations

and inequalities, rational and complex numbers, exponential and logarithmic functions. (pre-requisite: Algebra I and Geometry)

Honors Algebra II is an accelerated version of Algebra II. It extends and deepens the mathematical concepts and procedures development in Algebra I and introduces the mathematics student to higher order polynomial, rational and transcendental functions. Students will understand the hierarchy of the complex number system and relationships among the elements, properties and operations. Students will also understand the trigonometric functions and their relationships, understand statistical sampling and calculate measures of central tendency and spread. Emphasis is placed on relations and functions, systems of equations and inequalities, rational and complex numbers, exponential and logarithmic functions. More emphasis is placed on problem solving techniques that challenge students' level of competence. (pre-requisite: Algebra I and Geometry)

DE College Algebra is a college-level course offered in conjunction with Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn both high school and college credit. (pre-requisite: Algebra I, Geometry, Algebra II)

Applied Mathematical Concepts: Applied Mathematical Concepts is a math course designed for students who have a math ACT sub-score of 19 or higher. This course is designed for students who have an interest in careers that use applied mathematics such as banking, industry, human resources, etc. In-depth topics include financial mathematics, probability and statistics, and linear programming. (pre-requisite: Algebra I, Geometry, Algebra II)

Bridge Math: Bridge Math is designed for senior students who have a math ACT sub-score below 19. Concepts taught include emphasis on previously taught math concepts, college and career readiness standards, and real-world math application. (pre-requisite: Algebra I, Geometry, Algebra II)

SAILS Unified Bridge Math: SAILS Bridge Math is for senior students who are college-bound and with a current ACT math sub-score between 16-18. Students with math sub-scores in this range will likely be required to take remedial math upon college enrollment. SAILS Bridge Math is an online math program that is set up in modules and delivered on the HCHS campus. Students who complete all modules have the possibility of earning college credit and fulfilling the remedial math requirement. (pre-requisite: Algebra I, Geometry, Algebra II)

DE Statistics: This is a college-level course offered through Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Students will earn a credit in both high school Statistics and a college mathematics class recognized by many Tennessee public post-secondary schools. (pre-requisite: Algebra I, Geometry, Algebra II)

AP Statistics: This is an accelerated course for highly motivated students with a strong background in mathematics. Students will take the national Statistics exam for the opportunity to earn college credit for the course. (pre-requisite: Algebra I, Geometry, Algebra II)

Honors PreCalculus: This course is designed to prepare students for college math courses focusing on advanced math concepts. (pre-requisite: Algebra I, Geometry, Algebra II)

AP Calculus: This is an accelerated course for highly motivated students with a strong background in mathematics. Students will take the national Calculus exam for the opportunity to earn college credit for the course. Differential and integral calculus will be studied. (pre-requisite: Algebra I, Geometry, Algebra II; recommended to take prior to course: Honors PreCalculus)

SCIENCE

Every student is required to have a sequence of three credits in science for graduation. The courses include Biology I, Chemistry I and one other lab science course. In addition, it is a Henry County School Board Policy that students will be enrolled in a science course in their senior year. Data shows that students who take high school biology, chemistry and physics score higher on the ACT test than students who do not. In addition, many colleges and universities require incoming freshmen to have completed additional upper-level high school science courses, regardless of their intended college major. The science departments of Grove and HCHS provide a variety of opportunities for scientific exploration.

Biology I: Students will learn about living things through explorations in to the basic principles of biology, biochemistry, and micro-organisms. Learning will occur through both traditional and laboratory experiences.

Honors Biology I is an accelerated version of Biology I. More emphasis is placed on problem solving techniques that challenge students' level of competence. **This course is only offered at Grove.**

Physical Science: Physical Science is designed to prepare students to succeed in other high school courses, especially physics and chemistry. Physical Science focuses on the elements, atoms and other fundamental principles of basic chemistry.

Environmental Science: Environmental Science is a course that enables students to develop and understanding of the natural environment and the environmental problems facing the world.

Chemistry I: Chemistry I is designed to focus on fundamental problem solving skills, laboratory skills, data interpretation and the use of the periodic table of elements as a basic tool.

Honors Chemistry I is an accelerated version of Chemistry I. More emphasis is placed on problem solving techniques that challenge students' level of competence.

Honors Chemistry II: This is a second year Chemistry course, offering advanced study for students interested in majoring in science. Topics will include the nature of matter, chemical laws, chemical calculations, chemical compounds and equations and kinetics. (pre-requisite: Chemistry I)

Honors Biology II: Honors Biology II is a lab course focusing on cell structure and function, genetic principles, anatomy and physiology of plants, microorganisms and ecology. (pre-requisite: Biology I)

AP Physics: Physics will cover motion mechanics, electricity and magnetism, thermodynamics and light and optics. Extensive use of algebra is required for problem solving. This is a college level course offering advanced study of physics. Students will take the national physics exam for the opportunity to earn college credit for the course.

DE Biology I (1010) and DE Biology II (1020): This is a college level course offered in conjunction with Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn credit for both high school and college.

AP Biology: This is a college level course offering advanced study of biology. Students will take the national Biology exam for the opportunity to earn college credit for the course.

AP Chemistry:** This is a college level course offering advanced study of chemistry. Students will take the national Chemistry exam for the opportunity to earn college credit for the course.

AP Environmental Science: This is a college level course offering advanced study of environmental science. Students will take the national environmental science exam for the opportunity to earn college credit for the course.

SOCIAL STUDIES

AP Human Geography: This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of the Earth's surface. Students will learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. Students will also learn methods and tools for human research and applications. Students will take the national College Board exam for the opportunity to earn college credit for this course. **This course is only offered at Grove.**

World History: This course is designed to give the student an overview of world history and the development of human civilization from ancient times to the present.

Honors World History is an accelerated level of the World History course. In addition to regular course assignments, students will be expected to complete extensive reading, writing and research projects focusing on economics, politics and international relations.

US History: This course begins with a study of major themes that have shaped the formation of the United States and ends with a look at contemporary issues generated by those recurrent American themes.

DE US History: This is a college-level course offered in conjunction with Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn a credit in both high school Honors US History and a freshman history class.

AP US History *(course taught in tandem with AP English III, encompassing both semesters, students earn 1 credit in each):* This is a college level course offering advanced study of American History. Students will take the national US History exam for the opportunity to earn college credit for the course.

US Government: This course deals with the structure and functions of government with emphasis on political process, parties, and pressure groups. Public opinion, polling and campaigns will be examined as a part of the political process.

Honors US Government is an accelerated level of US Government. Students will be expected to complete extensive reading, writing and research assignments focusing on the American government.

Economics: This course examines how the American economy works.

Honors Economics is an accelerated level of Economics. Students will be expected to complete extensive reading, writing and research assignments focusing on the American economy.

Sociology: Students will explore the ways sociologists view society and also how they study the social world. In addition, students will examine culture, socialization, deviance and the structure and impact of institutions and organizations. Also, students will study selected social problems and how change impacts individuals and societies.

Honors Sociology is an accelerated level of Sociology. Students will be expected to complete extensive reading, writing and research assignments focusing on the social world.

DE Sociology: This course is offered through Jackson State Community College. Students will explore the ways sociologists view society, and also how they study the social world. In addition, students will examine culture, socialization, deviance and the structure and impact of institutions and organizations. Upon successful completion of the course, students will be awarded both high school and college credit.

DE Psychology: This course is offered through Jackson State Community College. Students will study the development of scientific attitudes and skills, including critical thinking, problem solving, and scientific methodology Students will elaborate on the importance of drawing evidence-based conclusions about psychological phenomena and gain knowledge on a wide array of issues on both individual and global levels.

AP Psychology: The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major fields within psychology, and also learn about the ethics and methods psychologists use in their science and practice.

TN History (1/2 credit)
Students will examine the history of Tennessee, including the cultural, geographic, economic, and political influences upon that history. Students will discuss Tennessee's indigenous peoples as well as the arrival of EuroAmerican settlers. Students will analyze and describe the foundation of the state of Tennessee. Students will identify and explain the origins, impact, and aftermath of the Civil War. Students will discuss the rise of a manufacturing economy. Finally, students will examine and discuss the Civil Rights Movement and Tennessee's modern economy and society.

Contemporary Issues (1/2 credit)
Students will use inquiry skills to examine the issues that impact the contemporary world. Students will analyze the historical, cultural, economic, and geographic factors that have elevated certain issues to levels of concern in the United States and around the globe. Students will engage in research and problem solving in order to better understand and assess significant current issues.

VISUAL AND PERFORMING ARTS
Students must take one credit of a fine or performing art to meet graduation requirements. Henry County Schools supports the offering of a strong and varied visual and performing arts program. Students have the opportunity to develop, advance and demonstrate their skill in choral music, theater, instrumental music, and studio art. Beginning, intermediate and advanced levels are offered in each genre. Several times each year, the talents of students are showcased through school and community events.

Art I—Intro to Art: The art curriculum is designed to study aesthetics, art criticism, art history and art production. In addition to developing sensitivity to aesthetic values, the skills of drawing, painting, ceramics, calligraphy and print making are explored.

Art II: Paint and Ceramics; Art III: Concept Design: Art II/III enhances skills learned in Art I by including more advanced projects. Projects include class assignments, murals and art work for the community. This course will provide career and school information and stimulate individual creative expression. (Pre-requisite: Art I for Art II; Art I and Art II for Art III)

AP Art:** The AP Art course is designed for students who are seriously interested in the practical experience of art. Students develop three portfolios for evaluation —2-D Design, 3-D Design, and Drawing—corresponding to the most common college foundation courses.

Theater Arts I, II and III: Theater Arts I is an introduction to theater, exploring its history, the structure and analysis of plays, the fundamentals of acting and the play production process. Students will learn to improvise scenes, and will read and perform

scenes from plays. Units in the technical aspect of theater such as scenery and lighting will also be included. Advanced classes are for those students interested in writing, acting, and directing plays. Performance will be stressed, culminating in a One-Act play presented for an audience. (classes taken in order)

Speech and Debate/Speech and Communications: Confidence and skill in oral communication are emphasized in this course. The intent is to prepare students for public speaking required in college courses as well as on the job. Training in debate, group discussion and student congress will be developed.

Music History: Music History provides an overview of music from Renaissance, Baroque, Classical, Romantic and Contemporary stylistic periods. Parallels are drawn between historical events and their impact on the development of music.

Music Theory: Music Theory is offered as a Fine Arts enrichment elective designed to expand a student's base musical knowledge. The class studies the structural elements of music. Curriculum topics include: pitch identification in all clefs, keyboard theory, scales, key signatures, intervals, triads & seventh chords, basic Roman Numeral analysis, basic part-writing techniques, basic harmonic progression, rhythm and meter, sight singing, ear training, basic melodic and rhythmic dictation, and the history and development of western music. Students taking this course should have a foundational knowledge of music concepts.

Chorus: All types and forms of music will be covered, from Bach to pop. All students are expected to perform in after-school concerts. Some music theory and music appreciation will be included. Students will be expected to work in both ensemble and solo situations.

Concert Singers, Bella Voce', and Men's Ensemble: More advanced classes than Chorus, these classes will continue the development of singing with mixed ensembles and in solo situations. Requirements are that each member is expected to participate in all after school performances and class activities. Students must have taken Chorus or have director approval to enroll in Concert Singers, Bella Voce', and/or Men's Ensemble.

Madrigals: This is an application only course. Students must apply and perform with the Choral faculty before participating in the course. Madrigals is a course in advanced choral singing. Extensive rehearsal time is expected. A national choral festival is attended every year. A large amount of time is devoted to civic and community performances.

Band, Percussion, and Color Guard: All band students participate in both marching and concert band. Marching season is July – November and includes performances at pep rallies, ball games, parades and marching competitions. Marching band will also participate in the World's Biggest Fish Fry and other parades in the spring. Concert season is October – May and includes performances at the Christmas Concert, spring concert, a concert festival and solo and ensemble events. All students are expected to attend after school rehearsals for all events. Students are provided a rehearsal schedule each month.

Strings: Instruction in stringed instruments is provided through the Strings class. Students must maintain their own instruments and must have had prior instruction in a stringed instrument.

DE Speech: This is a college-level course offered in conjunction with Jackson State Community College. Students will learn the art of public speaking and will practice speaking in front of others. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn a credit in both high school and college.

DE Music Appreciation: This is a college-level course offered in conjunction with Jackson State Community College. The pace and scope of the work is accelerated and students must exhibit self-discipline and motivation. Upon successful completion of the course, students will earn a credit in both high school and college.

PE/WELLNESS/PERSONAL FINANCE

Students are required to earn one credit in each of the following: PE, Wellness and Personal Finance. The knowledge and skills developed in these courses serve to prepare students to lead physically and financially healthy lifestyles.

Wellness: This class will cover the seven areas of wellness for a healthy lifestyle.

Physical Education: A goal of the physical education program is to develop knowledge of the rules, strategies and historical aspects of various sports, such as tennis and racquetball, basketball, volleyball. Focus will be on the benefits of an active lifestyle. Both Wellness and PE are required for all students.

Personal Fitness: Topics and activities will include personal fitness programs, stress management, fitness games, nutrition and weight-lifting. A personal work out plan will be designed and implemented.

Weight & Strength Training: This course is designed for the serious student athlete who has a desire to work on total body strength and fitness. Students will gain knowledge in fitness concepts such as frequency, intensity, duration, sets and repetitions. A weightlifting program designed to build strength and muscle will be developed and implemented.

Advanced Personal Fitness: Advanced topics and activities involved in personal fitness programs including weightlifting plans, personal eating plans, development of a personal fitness plan, as well as conditioning activities.

Personal Finance: Personal Finance is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential.

Additional Elective Opportunities

College Inquiry (11th grade): This course is designed to provide students support as they begin researching and applying for post-secondary options. Components may include virtual college tours, researching post-secondary options, completing surveys to assess personal interests and aptitudes, and completing projects which connect individual students needs to options available after high school.

College Success (12th grade): This course is designed to empower students to reach their educational, career and life goals. This class introduces students to a wide range of strategies, techniques and self-management tools commonly recognize to lead to college success. Key competencies for this class include Academic Planning, Setting Goals, Managing Time, Career Planning, Note Taking, Critical Thinking, Problem Solving, Developing Effective Presentations, Transition to Work, Career Exploration and Teamwork.

Driver Training: Driver Training is offered with the aim of helping instill in the potential driver an attitude of personal responsibility behind the wheel. Students will complete reading and writing assignments related to traffic laws and will receive behind-the-wheel driving experience.

FOREIGN LANGUAGE
Completion of two credits in the same world language is required for graduation. It is also a requirement for admission to most colleges and universities. A third year of the same language is highly recommended and sometimes expected of students competing for language scholarships, for admission to competitive universities, and for preparing for language placement exams.

Spanish I and II: These courses are an introduction to the language and the culture of the Spanish-speaking world.

Honors Spanish I and II will move at an accelerated pace and will include additional readings and course assignments outside of the classroom.

Honors Spanish III: Honors Spanish III is an intermediate level course. Students will increase their knowledge of Spanish grammar through the reading of Hispanic literature as well as writing and speaking Spanish in classwork, reports and tests.

German I and II: These courses are an introduction to the language and the culture of the German-speaking world.

Honors German I and II will move at an accelerated pace and will include additional readings and course assignments outside of the classroom.

French I and II: These courses are an introduction to the language and the culture of the French-speaking world.

Honors French I and II will move at an accelerated pace and will include additional readings and course assignments outside of the classroom.

Honors German III/IV and **Honors French III/IV** will be offered as available.

DE Spanish 1010 and DE Spanish 1020: A study of pronunciation, phonetics, and basic grammar through the past tense. Emphasis on basic conversational sentences and listening comprehension. Some discussion of Spanish history and customs.

DE French 1010 and DE French 1020: A study of pronunciation, phonetics, and basic grammar through the past tense. Emphasis on basic conversational sentences and listening comprehension. Some discussion of French history and customs.

COMPUTER EDUCATION
All students enrolled as 9th graders at Grove School will take a computer education course. Students will select between Computer Applications or Computer Science Foundations.

Computer Applications: This course is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools to explore the historical, social and ethical issues of using computer technology. The focus of the course is enhancing advanced keyboarding skills, becoming proficient in the use of word processing, spreadsheet, and presentation software applications. In addition, students will be introduced to database software applications. **This course is offered at Grove only.**

Computer Science Foundations: This course provides an engaging introduction to computing concepts. The course focuses on the conceptual ideas of computing so that students understand why computing tools and languages are used to solve problems through a study of human computer interaction, problem solving, web design, programming, and data analysis. This class is the first course in the Information Technology: Coding Program of Study. Upon completion of this course, students are prepared to advance to AP Computer Science Principles coursework. **This course is offered at Grove only.**

PROGRAMS OF STUDY (also known as PATHWAYS)
All students must select and complete a series of three courses in a specialized program of study. These programs of study are meant to provide a relevant framework for college and career-aligned rigorous courses that progress a student in knowledge and skills year after year. The courses in these programs of study provide invaluable opportunities for students to experience a subject they are passionate about and explore interests leading to postsecondary learning and future career paths. Each program of study offered to students in Henry County is aligned to national career clusters and developed with input from local business, education and industry leaders. Completing three sequenced courses in a specific program of study meets the three credit elective focus requirement for graduation.

Career Cluster: Advanced Manufacturing **Program of Study: Machining Technology**

Principles of Manufacturing: In this course, students will develop an understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in a manufacturing production setting. Course content covers basic quality principles and processes, blueprints and schematics, and systems.

Dual Enrollment Industrial Maintenance (TCAT):** The mission of the Industrial Maintenance Technology Program is designed to meet both the needs of students and the needs of their future employers to develop the skill, knowledge, and competencies needed to work and grow in the industrial maintenance field. This program includes classroom and "hands-on" experience in electronics, electrical, pneumatics, hydraulics, motor controls, programmable controllers, robotics, machine shop, and related math. Students completing this program are prepared to perform at entry level in a typical industrial environment. Students will gain experience using the newest RS Logic software in the PLC program.

Career Cluster: Advanced Manufacturing **Program of Study: Welding**

Principles of Manufacturing: In this course, students will develop an understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in a manufacturing production setting. Course content covers basic quality principles and processes, blueprints and schematics, and systems.

Dual Enrollment Welding (TCAT):** The mission of the Welding Technology Program is to prepare the student for entry into the labor market as a beginning welder. The course seeks to equip the student with the skills, attitudes, and work habits needed by those who successfully complete and enter into the labor market. The Welding program will teach industry acceptable standards of welds for gas metal arc and oxy-acetylene welding as well as the proper set-up of gas tungsten arc welding equipment.

Career Cluster: Agriculture **Program of Study: Veterinary Science**

Agriscience: This class explores animal science, agribusiness, agricultural mechanics, and natural resource management. The standards prepare students to choose among agricultural careers for the 21st century. **This course is offered at Grove only.**

Small Animal Science: Small Animal Science is an intermediate course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant. This course covers anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry. Upon completion of this course, proficient students will be prepared for more advanced coursework in veterinary and animal science.

Large Animal Science: Large Animal Science covers anatomy and physiological systems of different groups of large animals, as well as careers, leadership, and history of the industry.

Veterinary Science: Veterinary Science is an advanced course in animal science that covers principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and additional industry-related career and leadership knowledge and skills. Upon completion of this course, students will be able to pursue advanced study of veterinary science at a postsecondary institution. **Prerequisites:** Small Animal Science and Large Animal Science.

Career Cluster: Agriculture **Program of Study: Agribusiness**

Agriscience: This class explores animal science, agribusiness, agricultural mechanics, and natural resource management. The standards prepare students to choose among agricultural careers for the 21st century. **This course is offered at Grove only.**

Principles of Agribusiness: Principles of Agribusiness teaches students to apply the economic and business principles involved in the sale and supply of agricultural products to a wide range of careers across the industry and builds foundational knowledge of finance and marketing principles.

Ag Leadership: This is an applied-knowledge course for students interested in learning more about the attributes and skills of successful leaders in the agriculture industry. This course covers organizational behavior, communication, management, and leadership topics. Students participate in activities that will assist them in the development of communication and interpersonal skills transferrable to any agribusiness application.

Greenhouse: Greenhouse Management is an applied-knowledge course designed to prepare students to manage greenhouse operations. This course covers principles of greenhouse structures, plant health and growth, growing media, greenhouse crop selection and propagation, and management techniques.

Career Cluster: Agriculture **Program of Study: Ag Engineering**

Agriscience: This class explores animal science, agribusiness, agricultural mechanics, and natural resource management. The standards prepare students to choose among agricultural careers for the 21st century. **This course is offered at Grove only.**

DE Machine Tool (TCAT):** The Machine Tool Technology Program is designed to provide instruction enabling students to acquire fundamental knowledge of basic machine tool operation and setup procedures as well as instruction in precision measurement, bench work, blueprint reading and shop theory. Our program is on the "cutting edge" of the machine tool industry with an impressive 11 new machines... two Haas CNC lathes, two Haas CNC Mills, two Bridgeport mills, two Sharpe mills, two Sharpe lathes and a vertical band saw. With the machining industry going high tech, these machines are state-of-the-line quality.

Career Cluster: Architecture & Construction **Program of Study: Residential Construction**

Fundamentals of Construction: Fundamentals of Construction is a foundational course in the Architecture & Construction cluster covering essential knowledge, skills, and concepts required for careers in construction. Upon completion of this course, proficient students will be able to describe various construction fields and outline the steps necessary to advance in specific construction careers. Students will be able to employ tools safely and interpret construction drawings to complete projects demonstrating proper measurement and application of mathematical concepts. Standards in this course also include an overview of the construction industry and an introduction to building systems and materials.

Residential Construction: This is the second course in the Residential Construction program of study intended to prepare students for careers in construction by developing an understanding of the different phases of a construction project from start to finish. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill Page 2 in the earlier phases of building construction, including site layout, foundation systems, concrete, framing systems, and electrical systems. Students will be able to perform concrete work; frame walls, ceilings, and floors of a structure; and install proper wiring while safely employing tools and interpreting construction drawings to complete projects. Emphasis is placed on demonstrating proper measurement and application of mathematical concepts. Standards in this course also include principles of the construction industry and business and project management.

DE Residential Maintenance(TCAT):** The mission of the Residential Building Maintenance program is to prepare students to apply technical knowledge and skills to keep a building functioning and to service a variety of structures. Building maintenance workers have opportunities for employment in the repair/maintenance of residential and commercial building such as homes, apartments, schools, or government buildings. The objective of this course is to provide instruction in the basic maintenance and repair skills required to service building systems such as plumbing and electrical systems. Students will gain hands-on experience in electrical, plumbing, and basic carpentry.

Career Cluster: Architecture & Construction **Program of Study: Interior Design**

Interior Design I: This is the first course in the Interior Design program of study intended to prepare students for careers in residential and commercial interior design. Upon completion of this course, proficient students will be able to analyze and demonstrate the elements and the principles of design, and apply these concepts using sketching techniques in the creation of perspective floor plans.

Interior Design II: This is the second course in the Interior Design program of study intended to prepare students for careers in residential and commercial interior design. Students will engage in the development of board presentation techniques for residential spaces using textiles samples and three-dimensional sketches.

Interior Design III: This is an applied-knowledge course intended to prepare students for careers in the interior design industry. This course places special emphasis on an *internship opportunity* and a hands-on capstone project. Upon completion of this course, proficient students will create a design for a specific space and purpose, either residential or commercial, applying skills and knowledge from previous courses and industry-specific technologies.

Career Cluster: Graphic Design **Program of Study: Graphic Design (Formerly known as Digital Arts & Design)**

Graphic Design I: Digital Arts & Design I is a foundational course in the Arts, A/V Technology, & Communications cluster for students interested in art and design professions. The primary aim of this course is to build a strong understanding of the principles and elements of design and the design process.

Graphic Design II: builds on the basic principles and design process learned in the introductory Digital Arts & Design I course. Upon completion of this course, proficient students will be able to perform advanced software operations to create photographs and illustrations of increasing complexity. Students will employ design principles and use industry software to create layouts for a variety of applications. Standards in this course also include an overview of art and design industries, career exploration, and business management.

Graphic Design III: Digital Arts & Design III is the third course in the Digital Arts & Design program of study. Applying design skills developed in prior courses, students will expand their creative and critical thinking skills to create comprehensive multimedia projects and three-dimensional designs.

Career Cluster: Arts, Audio/Visual, Technology **Program of Study: Fashion Design**

Fashion Design I: Fashion Design I introduces students to the rich history of the fashion industry and the basic design principles that are integral to its operation. This course studies the history of the fashion industry, elements and principles of design, textile history and composition, as well as basic construction principles.

Fashion Design II: Fashion Design II is an applied-knowledge course intended to prepare students to pursue careers in the fashion industry. Building on the knowledge acquired in Foundations of Fashion Design, this course places special emphasis on apparel manufacturing and merchandising, marketing applications, and product and service management. In addition, students will explore trends in fashion design and engage with industry-specific technologies used to produce a variety of fabrics, garments, and accessories. Prerequisite: Fashion Design I.

Fashion Design III: This is an advanced Fashion Design class, designed to be the capstone course in the Fashion Design program of study. This course is designed to prepare students for further education and careers in the fashion industry. Through exposure to crucial business activities such as project management and product promotion, students will acquire advanced skills related to business professionalism, ethics, policies, and communication in the fashion industry. Students participate in an internship during this class. Prerequisites: Fashion Design I and II.

Career Cluster: Business Management **Program of Study: Office Management**

Computer Applications: This course is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools to explore the historical, social and ethical issues of using computer technology. The focus of the course is enhancing advanced keyboarding skills, becoming proficient in the use of word processing, spreadsheet, and presentation software applications. In addition, students will be introduced to database software applications. **This course is offered at Grove only.**

DE Administrative Office Technology (TCAT): The mission of the Administrative Office Technology program is to prepare students for success in the computerized office through technical training in the proper office procedures and the latest

software applications, as well as to ingrain in them the proper ethics and attitudes necessary to succeed in a working environment.

Career Cluster: Business Management **Program of Study: Health Services Admin**

Introduction to Business and Marketing: This is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics.

DE Health Information Management Technology: The Health Information Management Technology program is designed to develop the skills and knowledge needed to secure jobs in today's rapidly changing medical field. Students have the opportunity to study and experience "hands-on" training with today's advanced electronic health records software and develop the computer skills needed for the modern medical office. Each student has the opportunity to learn medical coding and insurance billing, as well as basic medical office skills.

Career Cluster: Teaching as a Profession **Program of Study: Teaching as a Profession**

Teaching as Profession: Teaching as a Profession is a course for students interested in learning about becoming a teacher, school counselor, trainer or librarian. This course is an introduction to the history of education in the USA, teaching strategies, student learning and educational technology. Students will conduct observations of educators at work and create a course portfolio. At the end of the course, students will have a fundamental understanding of successful instructional strategies.

Career Cluster: Finance **Program of Study: Accounting**

Introduction to Business and Marketing: This is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics.

Accounting I: Accounting I is an essential course for students who wish to pursue careers in business and finance, or for those who wish to develop important skillsets related to financial literacy. Whether students aspire to be future business owners or work in finance with other companies, accounting skills are fundamental to success and applicable in many different fields.

Accounting II: Accounting II is an advanced study of concepts, principles, and techniques used by businesses to maintain electronic and manual financial records. This course expands on content explored in Accounting I to cover the accounting processes of a variety of different firms, including merchandising, manufacturing, and service-oriented businesses.
Prerequisite: Accounting I

Career Cluster: Health Science **Program of Study: Diagnostic Services**

Health Science Education: Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services. This course will serve as a strong foundation for all of the Health Science programs of study.

Diagnostic Medicine: This is a second level course designed to prepare students to pursue careers in the fields of radiology, medical laboratory, optometry, and other patient diagnostic procedures. Upon completion of this course, proficient students will be able to describe new and evolving diagnostic technologies, compare and contrast the features of healthcare systems, explain the legal and ethical ramifications of the healthcare setting, and begin to perform foundational healthcare skills.

Anatomy and Physiology: Anatomy and Physiology is an upper level course (11th & 12th grades only) designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4)

demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems. **PREREQUISITES:** Health Science Education, Diagnostic Medicine or Medical Therapeutics, Biology I, and Chemistry I.

Cardiovascular Services: Cardiovascular Services is an applied course in the Diagnostic Services program of study intended to prepare students with an understanding of the roles and responsibilities of those seeking employment in the cardiovascular field of healthcare. **PREREQUISITES:** Health Science, Diagnostic Medicine, Anatomy & Physiology.

Career Cluster: Health Science **Program of Study: Nursing Services**

Health Science Education: Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services. This course will serve as a strong foundation for all of the Health Science programs of study.

Medical Therapeutics: Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. **PREREQUISITES:** Health Science

Anatomy and Physiology: Anatomy and Physiology is an upper level course (11th & 12th grades only) designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems. **PREREQUISITES:** Health Science Education, Diagnostic Medicine or Medical Therapeutics, Biology I, and Chemistry I.

Rehab Therapies: Rehab Therapies is an applied course designed to prepare students to pursue careers in rehabilitation services. Upon completion of this course, a proficient student will be able to identify careers in rehabilitation services, recognize diseases, disorders or injuries related to rehabilitation services and correlate the related anatomy and physiology then develop a plan of treatment with appropriate modalities. This course will focus on rehabilitation therapies. Units will include sports medicine, physical therapy, occupational therapy, speech / language therapy, art, music, dance therapy, and others. **PREREQUISITES:** Health Science, Medical Therapeutics, Anatomy & Physiology.

Nursing Services (Certified Nursing Assistant): Nursing Education is a capstone course designed to prepare students to pursue careers in the field of nursing. Upon completion of this course, a proficient student will be able to implement communication and interpersonal skills, maintain residents' rights and independence, provide care safely, prevent emergency situations, prevent infection through infection control, and skills required of a nursing assistant. At the conclusion of this course, if students have logged 40 hours of classroom instruction and 20 hours of classroom clinical instruction, and if they have completed 40 hours of site-based clinical with at least 24 of those hours spent in a long-term care facility, then they are eligible to take the certification examination as a Certified Nursing Assistant (CNA). Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality. **PREREQUISITES:** Health Science, Medical Therapeutics, Anatomy & Physiology, and Rehab Therapies.

Career Cluster: Health Science **Program of Study: Therapeutic Services**

Health Science Education: Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services. This course will serve as a strong foundation for all of the Health Science programs of study.

Medical Therapeutics: Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. **PREREQUISITES:** Health Science

Anatomy and Physiology: Anatomy and Physiology is an upper level course (11th & 12th grades only) designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems. **PREREQUISITES:** Health Science Education, Diagnostic Medicine or Medical Therapeutics, Biology I, and Chemistry I.

Rehab Therapies: Rehab Therapies is an applied course designed to prepare students to pursue careers in rehabilitation services. Upon completion of this course, a proficient student will be able to identify careers in rehabilitation services, recognize diseases, disorders or injuries related to rehabilitation services and correlate the related anatomy and physiology then develop a plan of treatment with appropriate modalities. This course will focus on rehabilitation therapies. Units will include sports medicine, physical therapy, occupational therapy, speech / language therapy, art, music, dance therapy, and others. **PREREQUISITES:** Health Science, Medical Therapeutics, Anatomy & Physiology.

Clinical Internship: Clinical Internship is a capstone course and work-based learning experience designed to provide students with real-world application of skills and knowledge obtained in Health Science courses. Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality. **PREREQUISITES:** Health Science, Medical Therapeutics, Anatomy & Physiology, and Rehab Therapies.

Career Cluster: Human Services **Program of Study: Social Health Services**

Intro to Human Studies: Introduction to Human Studies is a foundational course for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, or community volunteer. Upon completion of this course, a proficient student will have an understanding of human needs, overview of social services, career investigation, mental health, and communication. **This course is offered at Grove only.**

Lifespan Development: Lifespan Development builds basic knowledge in human growth and development. Upon completion of the course, proficient students will have knowledge of developmental theory, principles of growth, behavior of children from conception through adolescence, adult development and aging, and death and dying.

Family Studies: Family Studies is an applied knowledge course that examines the diversity and evolving structure of the modern family. Upon completion of the course, proficient students will have knowledge of the demographic, historical, and social changes of interpersonal relationships, as well as parenting, and the effect of stressors on the family.

Career Cluster: Human Services **Program of Study: Dietetics and Nutrition**

Intro to Human Studies: Introduction to Human Studies is a foundational course for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, or community volunteer. Upon completion of this course, a proficient student will have an understanding of human needs, overview of social services, career investigation, mental health, and communication. **This course is offered at Grove only.**

Foods I: This course focuses on learning the importance of nutrition for a healthy lifestyle. Foods I is for students interested in learning more about becoming a dietitian, nutritionist, counselor, or pursing a variety of scientific, health, or culinary arts professions. Upon completion of this course, proficient students will understand human anatomy and physiological systems, nutrition requirements, as well as social, cultural, and other impacts on food preparation and integrity.

Foods II: Students will be able to identify and analyze the elements of safe food preparation that include food chemistry, basic cooking techniques and proper use of preparation utensils and equipment. Students will also prepare small quantity, industry standard menus in a kitchen setting. **Prerequisite:** Foods I

Career Cluster: Human Services **Program of Study: Cosmetology**

DE Cosmetology(TCAT):** The mission of the Cosmetology Program is to provide students with the knowledge and training to enable them to become successful members to today's workforce. Students will be prepared for lifelong learning in order to meet the ever changing challenges of the community and state. The Cosmetology Program provides classroom and practical learning experiences that are concerned with care and beautification of hair, complexion, and hands. This program prepares its graduates for the state licensing examination. For an additional 300 hours, you can obtain your Instructor Training License.

Career Cluster: Information Technology **Program of Study: Coding**

Computer Science Foundations: This course provides an engaging introduction to computing concepts. The course focuses on the conceptual ideas of computing so that students understand why computing tools and languages are used to solve problems through a study of human computer interaction, problem solving, web design, programming, and data analysis. This class is the first course in the Information Technology: Coding Program of Study. Upon completion of this course, students are prepared to advance to AP Computer Science Principles coursework. **This course is offered at Grove only.**

Mobile App Design: In this course, students will create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun. The course places an emphasis on the history of computer technologies, web development, animation, design and development methodologies, code for mobile applications, developer tools, and career development.

AP Computer Science Principles: AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career.

AP Computer Science A: In this advanced Computer Science course, students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. Using the Java language, students will learn to apply programming tools and solve complex problems through hands-on experiences and examples.

DE Computer Information Technology(TCAT):** The mission of the Computer Information Technology Program is to prepare the student for entry into the computer operations field. The course seeks to equip the student with the skills, attitudes, and work habits needed by those entering the computer field. Computers are everywhere! With the ever-changing technology in today's society, it's almost impossible not to know how to operate a computer.

Career Cluster: Law, Corrections & Security **Program of Study: Law Enforcement Services**

Criminal Justice I: Criminal Justice I is the second course in Law Enforcement Services and the Legal and Correctional Services programs of study. It serves as a comprehensive survey of how the law enforcement, legal, and correctional systems interact with each other in the United States.

Criminal Justice II: Criminal Justice II is an integrated survey of the law and justice systems for students interested in pursuing careers in law enforcement and legal services. From initial crisis scenario management to arrest, transport, trial, and corrections, procedures and laws governing the application of justice in the United States are examined in detail, with special emphasis on the best practices and professional traits required of law enforcement and legal professionals. **Prerequisite:** Criminal Justice I.

Criminal Justice III: Investigation: Criminal Justice III: Investigations is the final course designed to equip students with the knowledge and skills to be successful in the sciences of criminal investigations. Students will learn terminology and investigation skills related to the crime scene, aspects of criminal behavior, and applications of the scientific inquiry to solve crimes. **Prerequisite:** Criminal Justice I and II.

Career Cluster: Marketing **Program of Study: Marketing Management**

Introduction to Business and Marketing: This is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics.

Marketing I: This course focuses on the study of marketing concepts and their practical applications. Students will examine the risks and challenges that marketers face to establish a competitive edge in the sale of products and services. Topics covered include foundational marketing functions such as promotion, distribution, and selling, as well as coverage of economics fundamentals, international marketing, and career development. Upon completion of this course, proficient students will understand the economic principles, the marketing mix, and product development and selling strategies.

Marketing II (Travel and Tourism): Marketing II is a study of marketing concepts and principles used in management. Students will examine the challenges, responsibilities, and risks managers face in today's workplace. Subject matter includes finance, business ownership, risk management, marketing information systems, purchasing, promotion, and human resource skills. Students will participate in and complete projects with a local partner businesses. Projects in the course will focus on

business ownership and business management and be based on authentic scenarios, materials, and other business information from which students could learn.

Marketing III (Sports and Entertainment): This class is designed to be a project-based, capstone experience in which students research, prepare, deliver, and reflect upon an original event for a community organization, business, or non-profit. Upon completion of this course, proficient students will further refine leadership, teamwork, and management skills acquired in previous courses and apply them through application in a project based setting.

Career Cluster: STEM **Program of Study: STEM Education**

STEM I: STEM I is a foundational course in the STEM cluster for students interested in learning more about careers in science, technology, engineering and mathematics. This course covers basic skills required for STEM fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in both the engineering design and the scientific inquiry processes. They conduct research to develop meaningful questions, define simple problem scenarios and scientific investigations, develop fundamental design solutions, conduct basic mathematical modeling and data analysis, and effectively communicate solutions and scientific explanations to others. This course is designed to explore hands-on application of science, technology, engineering and math.

STEM II: STEM II is a project-based learning experience for students who wish to further explore the dynamic range of STEM fields introduced in STEM I: Foundation. Building on the content and critical thinking frameworks of STEM I, this course asks students to apply the scientific inquiry and engineering design processes to a course-long project selected by the instructor with the help of student input. Instructors design a project in one of two broad pathways (traditional sciences or engineering) that reflects the interest of the class as a whole; the students then apply the steps of the scientific inquiry or the engineering design process throughout the course to ask questions, test hypotheses, model solutions, and communicate results. In some cases, instructors may be able to design hybrid projects that employ elements of both the scientific inquiry and the engineering design process. Upon completion of this course, proficient students will have a thorough understanding of how scientists and engineers research problems and methodically apply STEM knowledge and skills; and they will be able to present and defend a scientific explanation and/or an engineering design solution to comprehensive STEM-related scenarios.

STEM III: STEM III is an applied course in the STEM career cluster which allows students to work in groups to solve a problem or answer a scientific question drawn from real-world scenarios within their schools or communities. This course builds on STEM I: Foundation and STEM II: Applications by applying scientific and engineering knowledge and skills to a team project. Upon completion of this course, proficient students will be able to effectively use skills such as project management, team communication, leadership, and decision making. They will also be able to effectively transfer the teamwork skills from the classroom to a work setting.

STEM IV: STEM IV is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous STEM Education courses. In addition to developing an understanding of the professional and ethical issues encountered by STEM professionals, students learn to refine their skills in problem solving, research, communication, data analysis, teamwork, and project management. Upon completion of this course, proficient students will be prepared for postsecondary study in a STEM field.

Career Cluster: Transportation & Distribution **Program of Study: Automotive Maintenance & Repair**

Auto Maintenance and Light Repair I: The Maintenance and Light Repair I (MLR I) course prepares students for entry into Maintenance and Light Repair II. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills.

Auto Maintenance and Light Repair II: The Maintenance and Light Repair II (MLR II) course prepares students for entry into Maintenance and Light Repair III. Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF). **Prerequisite:** Auto Maintenance and Light Repair I.

Auto Maintenance and Light Repair III: The Maintenance and Light Repair III (MLR III) course prepares students for entry into Maintenance and Light Repair IV. Students study and service suspension and steering systems and brake systems. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF). **Prerequisite:** Auto Maintenance and Light Repair II.

Auto Maintenance and Light Repair VI: The Maintenance and Light Repair IV (MLR IV) course prepares students for entry into the automotive workforce or into post-secondary training. Student's study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, and practice workplace soft skills. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF). **Prerequisite:** Auto Maintenance and Light Repair III.

DE Motorcycle/ATV(TCAT):** The aim of this course is to provide trainees with a thorough understanding of the methods of servicing and repairing motorcycles and all terrain vehicles. Training also includes learning to make proper diagnosis using test equipment, hand tools, special equipment, precision measuring tools, service manuals, and specifications.

DE Collision Repair(TCAT):** If you are looking for an exciting, rewarding and profitable career, the Collision Repair Technology program is fully equipped to serve your training needs. The program uses the I-CAR curriculum, which is the most up to date text-book training available. Whether you want to work full time in a repair shop, learn an exciting new hobby, fix wrecks, restore cars, or paint this program may be what you are looking for.

Please note: **Additional courses may be offered, depending on the following: teacher and program availability, arrangements with post-secondary institutions, additional course offerings allowed by the state department of education. Please see the appropriate grade level registration cards for these potential course offerings** registration cards for these potential course offerings**

HC SCHOOLS

2019-2020 PROGRAM OF STUDY GUIDE

National Career Clusters	Programs of Study	Level 1 Courses	Level 2 Courses	Level 3 Courses	Level 4 Courses
Advanced Manufacturing	Machining Technology		Principles of Manufacturing (5922)	~DE Industrial Maintenance** (4060)	~DE Industrial Maintenance**(4060)
Advanced Manufacturing	Welding		Principles of Manufacturing (5922)	~DE Welding**(4062)	~DE Welding**(4062)
Agriculture	Veterinary Science	Agriscience (Grove only)	Small Animal Science (5958)	Large Animal Science (6116)	Veterinary Science (5961)
Agriculture	Agribusiness	Agriscience (Grove only)	Principles of Agribusiness (5946)	Ag Leadership (5956)	Greenhouse Management (5954)
Agriculture	Ag Engineering	Agriscience (Grove only)		~DE Machine Tool**(4066)	~DE Machine Tool**(4066)
Architecture & Construction	Residential Construction		Fundamentals of Construction (6073)	Residential Construction (6162) and/or ~DE Residential Maintenance**(4072)	~DE Residential Maintenance**(4072)
Architecture & Construction	Interior Design		Interior Design I (6014)	Interior Design II (6006)	Interior Design III (6121)
Arts, Audio/Visual Tech	Graphic Design		Graphic Design I (6084)	Graphic Design II (6086)	Graphic Design III (6087)
Arts, Audio/Visual Tech	Fashion Design		Fashion Design I (6120)	Fashion Design II (6008)	Fashion Design III (6009)
Business Management	Office Management	Computer Apps (Grove only)		~DE Admin Office Technology** (4083)	~DE Admin Office Technology** (4083)
Business Management	Health Services Admin	Intro to Bus & Mktg (Grove only)		~DE Health Info Mangt Technology**(4084)	~DE Health Info Mangt Technology**(4084)
Education & Training	Teaching as a Profession		Teaching as a Profession I		
Finance	Accounting	Intro to Bus & Mktg (Grove only)	Accounting I (5910)	Accounting II (5911) and/or #DE Accounting(4090)	1st Patriot Bank and/or AP Statistics (3129)
Finance	Banking & Finance	Intro to Bus & Mktg (Grove only)	Accounting I (5910)	1st Patriot Bank (5899PB)	1st Patriot Bank (5899PB)
Health Science	Diagnostic Services	Health Science (5998)	Diagnostic Medicine (5994)	Anatomy & Physiology (5991)	Cardiovascular Services (6131)
Health Science	Nursing Services	Health Science (5998)	Medical Therapeutics (5999)	Anatomy & Physiology (5991) / Rehab Therapies (5990)	Nursing Services (6000)
Health Science	Therapeutic Services	Health Science (5998)	Medical Therapeutics (5999)	Anatomy & Physiology (5991) / Rehab Therapies (5990)	Clinical Internship (5993)
Human Services	Social Health Services	Intro Human Serv (Grove only)	Lifespan Develop (6013)	Family Studies (6136)	Sociology (3432) or Honors Sociology (3432H) or DE Sociology (4027) or Psychology (3433) or DE Psychology (4029) or AP Psychology (3447)
Human Services	Dietetics & Nutrition	Intro Human Serv (Grove only)	Foods I (6005)	Foods II (6007)	Sociology (3432) or Honors Sociology (3432H) or DE Sociology (4027) or Psychology (3433) or DE Psychology (4029) or AP Psychology (3447)
Human Services	Cosmetology			~DE Cosmetology**(4110)	~DE Cosmetology**(4110)
Information Technology	Coding	Comp Sci Found (Grove only)	Mobile App Development (6178)	AP Computer Science Principles (3634) and/or ~DE Computer Info Tech**(4113)	AP Computer Science A (3635) and/or ~DE Computer Info Tech**(4113)
Law, Corrections & Security	Law Enforcement Services		Criminal Justice I (5987)	Criminal Justice II (5988)	Criminal Justice III (5989)
Marketing	Marketing Management	Intro to Bus & Mktg (Grove only)	Marketing I (5931)	Marketing II—Travel and Tourism (5932)	Marketing III—Sports and Entertainment (5936)
STEM	STEM Applications	STEM I (6144)	STEM II (6145)	STEM III (6146)	STEM IV (6147)
Transport & Distribution	Auto Maint & Repair		Auto MLR I (61305879) AND Auto MLR II (5880)	Auto MLR III** (5881F AND 5881S) and/or ~DE Moto/ATV Repair** (4128) or ~DE Collision Repair**(4129)	Auto MLR IV** (5822F AND 5882S) and/or ~DE Moto/ATV Repair**(4128) or ~DE Collision Repair**(4129)

Appendix D: Henry County Schools CTE Course Enrollment Data Table

All CTE Programs of Study*	Level 1 Courses	Level 2 Courses	Level 3 Courses	Level 4 Courses	Industry Certification Attainment	Work-based Learning Placements
2017-2018 All Students	685	601	524	404	15 (CNA)	15
2018-2019 All Students	744	611	491	447	65 (CNA, OSHA 10, Adobe Certified Designer)	24
2019-2020 All Students	761	608	485	469	200 Projected (CNA, OSHA 10, Adobe Certified Designer, CMA)	30

*Enrollment on this chart represents the number of student seat counts taken during the respective school year. It is important to note that individual students may be represented multiple times in student seat counts, as students may be enrolled in multiple CTE courses in the same school year.

Subgroup Enrollment in CTE Programs of Study	Male	Female	White	Black, Hispanic, Native American	Students with Disabilities	Economically Disadvantaged
2017-2018	437	342	707	72	36	423
2018-2019	486	346	730	102	40	469
2019-2020	526	380	796	112	45	501

Agribusiness Program of Study Course Progression Document

The Agribusiness program of study teaches students to apply the economic and business principles involved in the sale and supply of agricultural products to a wide range of careers across the industry. In addition to building foundational knowledge of finance and marketing principles as they apply to agricultural businesses, courses in this program of study teach students essential leadership, management, and communications skills to help them succeed in future agribusiness careers.

Level 1 Course	Level 2 Course	Level 3 Course	Level 4 Course
Agriscience (offered at Grove only)	Principles of Agribusiness	Ag Leadership	Greenhouse Management
Agriscience is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, & Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework.	Principles of Agribusiness teaches students to apply the economic and business principles involved in the sale and supply of agricultural products to a wide range of careers across the industry and builds foundational knowledge of finance and marketing principles.	Ag Leadership is an applied-knowledge course for students interested in learning more about the attributes and skills of successful leaders in the agriculture industry. This course covers organizational behavior, communication, management, and leadership topics. Students participate in activities that will assist them in the development of communication and interpersonal skills transferrable to any agribusiness application.	Greenhouse Management is an applied-knowledge course designed to prepare students to manage greenhouse operations. This course covers principles of greenhouse structures, plant health and growth, growing media, greenhouse crop selection and propagation, and management techniques. Upon completion of this course, proficient students will be equipped with the technical knowledge and skills needed to prepare for further education and careers in horticulture production.

Veterinary and Animal Science Program of Study Course Progression Document

Veterinary and Animal Science is designed for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. In this program of study, course content covers such topics and skills as principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and the anatomical/physiological systems of a range of small and large animals.

Level 1 Course	Level 2 Course	Level 3 Course	Level 4 Course
Agriscience (offered at Grove only)	Small Animal Science	Large Animal Science	Veterinary Science
Agriscience is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, & Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework.	Small Animal Science is an intermediate course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry.	Large Animal Science is an applied course in veterinary and animal science for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers anatomy and physiological systems of different groups of large animals, as well as careers, leadership, and history of the industry.	Veterinary Science is an advanced course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and additional industry-related career and leadership knowledge and skills.

Agricultural Engineering and Applied Technologies Program of Study Course Progression Document

Agricultural Engineering and Applied Technologies prepares students for careers or further study in engineering, environmental science, agricultural design and research, and agricultural mechanics. Courses in this program of study address navigation, maintenance, repair, and overhaul of electrical motors, hydraulic systems, and fuel-powered engines. In addition, special emphasis is given to the many modern applications of geographic information systems (GIS) and global positioning systems (GPS) to achieve various agricultural goals, preparing students for immediate application of these skills in a career setting or postsecondary institution.

Level 1 Course	Level 2 Course	Level 3 Course	Level 4 Course
Agriscience (offered at Grove only)	Principles of Ag Mechanics	Dual Enrollment Machine Tool (TCAT Paris)	
Agriscience is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, & Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework.	Principles of Agricultural Mechanics is an intermediate course introducing students to basic skills and knowledge in construction and land management for both rural and urban environments. This course covers topics including project management, basic engine and motor mechanics, land surveying, irrigation and drainage, agricultural structures, and basic metalworking techniques.	The DE Machine Tool program is designed to provide instruction enabling students to acquire fundamental knowledge of basic machine tool operation and setup procedures as well as instruction in precision measurement, bench work, blueprint reading and shop theory. Students are encouraged to enroll in a minimum of 3 hours of instructional time per semester, during both their 11th and 12th grade school years. Students are eligible to use dual enrollment grant funds to pay for course tuition.	

ADVANCED AGRICULTURE TECHNOLOGY

The Advanced Agriculture Technology program will put today's agriculture student on the leading edge of innovative solutions, using technologies to improve agricultural operations. Recent advancements in technologies—audiovisual communications, digital sensors, data analysis program applications, and unmanned aerial vehicles—are fundamentally changing the landscape of modern agriculture. The result of these developing technologies is an explosion of job opportunities for tech-minded agriculture students.

Students may earn certificates by completing courses that offer exposure to principles of agriculture, horticulture and land management studies, livestock management, agribusiness and finance, and precision agriculture. Additional coursework will include electricity and electronics in farming operations, ag mechanics, introduction to welding, and computer skills for agriculture applications.

Program Information:

Time Commitment	Full Time
Typical Program Length	16 months
Clock Hour Requirement	1,728
Credentials Offered	Certificates: Agriculture Operations Helper Certificate Agriculture Operations Specialist Certificate Diplomas: Crop Production Technology Livestock Production Technology Precision Agriculture Technology
Expected Tuition and Fees	$5,500.00
Expected Textbook and Supplies Cost	$2,000.00
First Trimester:	Second Trimester:
AAT Worker Characteristics	AAT Worker Characteristics
AAT Technology Foundations	AAT Soil Maintenance
AAT Introduction to Agriculture	AAT Livestock Maintenance
AAT Agricultural Safety Applications	AAT Shop Principles
AAT Introduction to Computer Technology	AAT Basic Welding
AAT Livestock and Equipment Management	AAT Basic Electricity
AAT Introduction to Precision Agriculture	AAT Principles of Agricultural Finance
Third Trimester:	Fourth Trimester:
AAT Worker Characteristics	AAT Worker Characteristics
AAT Farm Machinery and Equipment	*Modules for completion of additional diploma
AAT Ag Building and Design	Crop Production Technology Diploma: AAT Crop Marketing
AAT Soil and Plant Management	Livestock Production Management Diploma: AAT Herd Management AAT Pasture Management AAT Livestock Marketing
	Precision Production Technology Diploma: AAT Advanced Precision Agriculture AAT Advanced Farming Systems

Henry County
Work Ethic Certificate Standards

Category 1: Must earn 6 of 9 points

1. **Attendance Standard**
   (1 pt.) Student has no more than 5 absences from school during the senior year.
   (2 pts.) Student has no more than 3 absences from school during the senior year.
   (3 pts.) Student has no more than 1 absence from school during the senior year.
2. **Absence Standard**
   (1 pt.) Student has no more than one unexcused absence from school during the senior year.
   (2 pts.) Student has no unexcused absences from school during the senior year.
3. **Tardiness Standard**
   (1 pt.) Student has no more than two unexcused tardies to school during the senior year.
   (2 pts.) Student has no more than one unexcused tardy to school during the senior year.
4. **Discipline Standard**
   (1 pt.) Student has no more than one discipline referral during the senior year.
   (2 pts.) Student has no discipline referrals during the senior year.

Category 2: Must earn 5 of 5 points

5. **Drug Free Standard**
   (5 pts.) Student voluntarily presents written proof of negative drug test
   (PROOF MUST BE DATED IN TIMEFRAME OF JAN 15-MAR 15, 2019)

Category 3: Must earn 9 of 26 points

6. **CTE Coursework Standard**
   (1 pt.) Student has successfully completed at least one CTE course by the end of the senior year.
   (2 pts.) Student has successfully completed at least two CTE courses by the end of the senior year.
   (3 pts.) Student has successfully completed at least three CTE courses by the end of the senior year.
7. **CTE Competition Standard**
   (1 pt.) Student has competed in an approved regional level CTE competition by the end of their senior year.
   (2 pts.) Student has competed in an approved state level CTE competition by the end of their senior year.
   (3 pts.) Student has competed in an approved national level CTE competition by the end of their senior year.
8. **TN Promise Standard**
   (2 pts.) Student is in good standing with TN Promise and has completed the required 8 hours of community service.
9. **Post-Secondary Standard**
   (2 pts.) Student has successfully completed a post-secondary course during or before the senior year.
10. **Industry Certification Standard**
    (2 pts.) Student has received a national industry certification during or before the senior year.
11. **Enrollment in Post-Secondary Standard**
    (2 pts.) Student is registered or has applied at a post-secondary institution for the fall of the graduating year.
12. **Career Readiness Certificate Standard**
    (2 pts.) Student has achieved a Bronze Level Career Readiness Certificate.
    (4 pts.) Student has achieved a Silver Level Career Readiness Certificate.
    (6 pts.) Student has achieved a Gold or Platinum Level Career Readiness Certificate.
13. **Industry Awareness Standard**
    (1 pt.) Student has participated in one industry awareness event during the senior year.
    (2 pts.) Student has participated in more than one industry awareness event during the senior year.
    (3 pts.) Student has participated in an internship or work based learning activity.

You may count only a single point value in each of the thirteen categories (for ex: you can collect 1 pt OR 2 pts OR 3 pts for #6)
To receive the Work Ethic Certificate, a student must earn a minimum of 20 points and a regular high school diploma

Work-Based Learning Framework

Henry County Schools recognizes the importance of enriched and diverse opportunities for students to learn, perform and be recognized. As a district, we are committed to providing these opportunities. The community is the natural environment in which to provide students with meaningful work and authentic experience. The workplace offers exceptional opportunities to develop school-to-work relationships, providing students with positive and necessary attention and support. Work-Based Learning placements allows students to develop the skills required to successfully transition from high school to higher education and careers.

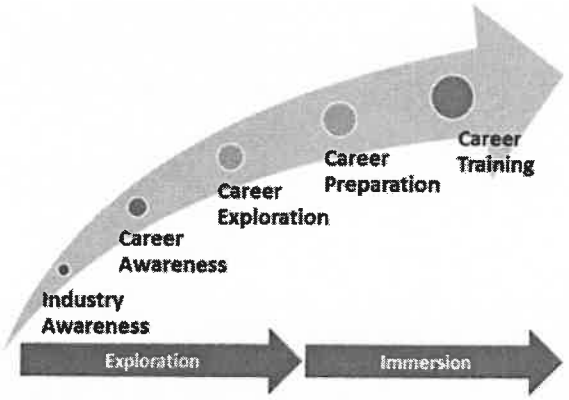
Research shows that students who participate in workplace readiness activities while still in middle and high school:

- Make connections between real work expectations and the classroom
- Pursue education with a greater sense of purpose and experience enriched learning
- Interact with positive adult role models and experience enhanced self-esteem
- Expand their horizons and awareness of future work options
- Experience a range of opportunities not traditional for their gender, race or ethnicity

Several education and workforce development initiatives in the United States encourage and support work-based learning. The Carl D. Perkins Vocational and Technical Education Act, the Workforce Investment Act and the School-to-Work Opportunities Act all provide for both school-based and work-based learning that supports students in becoming prepared for the future. Work-based learning is an essential component of a rigorous and relevant education designed to better prepare all students for the future.

All work-based learning experiences should:

1. Be developmentally appropriate
2. Assess student performance
3. Include an orientation for students, parents, and workforce partners
4. Provide opportunities for reflection, linking to the student's future work goals
5. Explore all aspects of the industry
6. Comply with state and federal labor laws



Work-Based Learning Continuum

Work-based learning is most effective when students are provided a developmental continuum of activities that address industry awareness, career awareness, career exploration, career preparation, and career training. This is accomplished through a series of workplace exposures combined with and supported by classroom activity over time.

Industry Awareness Activities are designed to introduce students to broad career clusters, and industries in the local community that fit into those clusters. These activities begin as early as kindergarten, and continue through high school.

Career Awareness Activities are designed to make students aware of the range of occupations available in an industry. These activities help students begin to understand the skills required for specific occupations and the expectations of the workplace. Career awareness activities may include workplace tours, field trips or informational interviews.

- Workplace Tours and Field Trips: Career awareness activities in which students visit a workplace, learn about the business, meet employees, ask questions and observe work in progress.
- Informational Interview: A career awareness activity in which students formally interview a workplace partner about his or her industry and chosen profession. The interview includes discussion of the career itself, duties and daily activities of the job and the level of education required to be successful. The students also explore growth opportunities in the industry and salary ranges for different occupations.

Career Exploration Activities provide students with the opportunity to explore fields of interest related to their career goals and academic learning. Students work closely with an adult supervisor and participate in appropriate hands-on workplace experiences. Career exploration activities may include job shadowing, career mentoring or service learning.

- Job Shadowing: A career exploration activity in which students observe the workday of a professional, interact with clients or customers, and attend meetings and other appointments. Job shadows are designed to help students explore a field of interest while developing research skills and building occupational knowledge through a facilitated, active learning process.
- Career Mentoring: A career exploration activity in which the student is matched one-to-one with an adult professional in a chosen field of interest to explore a career and related issues. The career mentor serves as a resource for the student by sharing insights and providing guidance about the workplace, careers and education.

- Service Learning: A career exploration activity in which the method of teaching and learning combines academic work with service and social action. Students complete a planned series of activities and apply their skills and knowledge to help meet a need in the school or greater community.

Career Preparation Activities provide an in-depth discovery of a particular career, linking the skills utilized in the workplace with academic learning. These activities also allow for the development of career and occupational skills. Career preparation activities include work experience and internship.

- Work Experience: A career preparation activity in which students are at a workplace doing real work for pay. They are held to the same expectations as all employees. The workplace supervisor conducts evaluations based on workplace expectations and performance. These experiences range from regular, paid employment to subsidized employment and learning-rich work experience.
- Internship: A career preparation activity in which students are placed in a business for a defined period of time to participate in and observe work firsthand within a given industry. Internships are highly structured experiences that occur at a workplace. Unlike work experience, internships often allow students to rotate through a number of departments and job functions.

Career Training Activities provide an in-depth, on-the-job training in a specialized learning program. Career training activities typically include apprenticeships.

- Apprenticeship: A career preparation activity designed to prepare an individual, generally a high school senior or recent graduate, for careers in the skilled crafts and trades. Apprenticeships consist of paid, on-the-job training supplemented by related classroom instruction. Apprenticeship training usually requires one to five years to complete, depending on which occupation is chosen.

The Role of the Work-Based Learning Coordinator

Role 1: Plan and Prepare for Successful Experiences

Planning and preparation make all the difference in the success of work-based learning and increase the likelihood of expanded workplace partner participation. Deliberate attention ahead of time will ensure a quality experience for students, workplace partners and teachers as well. The WBL Coordinator will be responsible for all structural elements, such as proper documentation of parent permission, insurance coverage, and work and learning expectation plans. The WBL Coordinator will be the primary contact liaison between the school system and workforce employers. The WBL Coordinator will work closely with the individual workforce employers who will supervise the students.

Provide a thorough orientation for both students and workplace partners. In order to maximize learning and promote safety, the WBL Coordinator will provide orientation and preparation activities both in the classroom and at the workplace. Students, teachers, worksite supervisors and other participating employees should be adequately prepared. The orientation should cover the nature of the business, workplace culture and any safety, health or legal considerations associated with the experience. Students should be held to the same expectations as all employees in terms of timeliness, dress and workplace conduct. Connections should be made between the work, the skills required and academic learning. Adequate preparation combined with structured opportunities for students to reflect on the experience is critical to the success and value of work-based learning. At school, all student orientations should include opportunities for students to learn the parameters and expectations of their work-based learning experience, assess their workplace skills, determine what they would like to learn, and, an introduction to the Work-Based Learning Plan and Evaluation tool.

Promote a shared understanding of the expectations of the experience. The WBL Coordinator, in partnership with workforce employers, will assist students in the development of the work-based learning plan, outlining projects or tasks the student will undertake and the desired learning objectives. Rich learning experiences at a workplace are supported by good communication right from the start. Teachers, youth program staff and workplace partners should have a shared understanding of the roles, expectations and objectives (both work-based and school-based) of the experience. Teachers should provide written materials such as a Work-Based Learning Contract, Work-Based Learning Permission for transportation, a procedures manual, Work-Based Learning Plan and Evaluation tool and a communication strategy to support the experience.

Role 2: Student Placement and Supervision

Coach students in setting personal goals and establishing learning objectives. The classroom orientation is an appropriate setting in which students can become aware of and articulate skills, career interests and plans to expand their knowledge and awareness. Teachers and worksite supervisors are responsible for supporting students through coaching and mentoring, thus connecting their workplace experience to their academic work. The WBL Coordinator will support students in order to maximize their learning.

Provide Effective Supervision. Effective supervision is a key element in reinforcing a work-based learning experience. The WBL Coordinator will provide expertise and resources to worksite supervisors to assist them in successfully mentoring the students' full learning experience as it connects to both the workplace and school site. Worksite supervisors and the WBL Coordinator will provide frequent feedback to students, demonstrate and explain key tasks and regularly assess student performance.

Make regular visits to the workplace. Structured opportunities to discuss the student's learning at the workplace prove to be beneficial to all parties. While it is sometimes difficult to meet with the worksite supervisor and the student at the same time, it is important to make the effort. The best possible meeting is one in which the student and the worksite supervisor are present with the WBL Coordinator. The WBL Coordinator will schedule regular visits or phone calls to touch base with both students and workplace partners. After the work-based learning experience has begun, early follow-up visits and ongoing contacts are essential to its success. The WBL Coordinator will also arrange periodic meetings with students at the school site to review their experiences in relation to academic performance.

Role 3: Partnership Development

Development of new community partners. Program quality and continuity are best maintained through ongoing communication with current community partners, while also developing new workforce partnerships. Relationships are enhanced as agencies, citizens and local government officials find that their expertise and counsel is sought by the school system. Learning occurs as youth-serving agencies, citizens and local government officials collaborate by sharing expertise.

Role 4: K to J Pipeline

The WBL Coordinator will work closely within all levels of the school system to develop a comprehensive plan for system-wide implementation of the Work-Based Learning Continuum. This implementation plan will require working with school counselors and administrators at all levels to create opportunities for appropriate work-based learning activities for each grade level. A minimum of 2 age-appropriate activities will be incorporated for grades K-5 each year; a minimum of 4 age-appropriate activities will be incorporated for grades 6-9; students in grades 10-12 will be exposed to monthly work-based learning and/or workforce development opportunities.

Role 5: Share Successful Experiences

The WBL Coordinator will provide current and future partners with the support and encouragement they need and to encourage their participation. The WBL Coordinator will develop communication systems (print media, social media outlets, etc..) that let community partners know what classroom activities students are engaged in that can support their learning at the workforce site. The WBL Coordinator will remain informed of the academic concepts students are working with at school so that workforce development opportunities can reinforce student learning.